Nitric Oxide

Safety Data Sheet 907078

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 09/19/2016 Supersedes: 07/29/2016 Version: 2.1

SECTION 1: Identification

1.1. Identification

Product form	:	Substance
Substance name	:	Nitric Oxide
CAS-No.	:	10102-43-9
Product code	:	SG-1001-08327
Formula	:	NO

1.2. Recommended use and restrictions on use

Use of the substance/mixture	:	Manufacture of substances Laboratory chemicals Semiconductor

1.3. Supplier

Air Liquide USA LLC and its affiliates
9811 Katy Freeway, Suite 100
Houston, TX 77024 - USA
T 1-800-819-1704
www.us.airliquide.com

1.4. Emergency telephone number

Emergency number	:	Chemtrec: 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Oxidizing gases Category 1	H270	May cause or intensify fire; oxidizer
Gases under pressure Compressed gas	H280	Contains gas under pressure; may explode if heated
Acute toxicity (inhalation:gas) Category 1	H330	Fatal if inhaled
Skin corrosion/irritation Category 1B	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Specific target organ toxicity (single exposure) Category 2	H371	May cause damage to organs (lungs) (Inhalation)

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS03 GHS04 GHS05 GHS06 GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) :
H270 - May cause or intensify fire; oxidizer
H280 - Contains gas under pressure; may explode if heated
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H330 - Fatal if inhaled
H371 - May cause damage to organs (lungs) (Inhalation)
CGA-HG11 - Symptoms may be delayed
CGA-HG22 - Corrosive to the respiratory tract

Precautionary statements (GHS-US) :
P202 - Do not handle until all safety precautions have been read and understood.
P220 - Keep/Store away from Combustible materials, clothing
P260 - Do not breathe gas.

P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection, face protection, protective gloves, protective clothing.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P403 - Store in a well-ventilated place.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations
P244 - Keep reduction valves/valves and fittings free from oil and grease
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P370+P376 - In case of fire: Stop leak if safe to do so.
P307+P311 - If exposed: Call a poison center/doctor
P284 - Wear respiratory protection. Consult respirator supplier´s product information for the selection of the appropriate respiratory protection.
CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52°C/125 °F
CGA-PG05 - Use a back flow preventive device in the piping
CGA-PG06 - Close valve after each use and when empty
CGA-PG10 - Use only with equipment rated for cylinder pressure
CGA-PG14 - Approach suspected leak area with caution
CGA-PG18 - When returning cylinder, install leak tight valve outlet cap or plug
CGA-PG20 - Use only with equipment of compatible materials of construction and rated for cylinder pressure
CGA-PG21 - Open valve slowly
CGA-PG22 - Use only with equipment cleaned for oxygen service

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	GHS-US classification
Nitric Oxide (Main constituent)	(CAS-No.) 10102-43-9	> 99.9	Ox. Gas 1, H270 Press. Gas (Comp.), H280 Acute Tox. 1 (Inhalation:gas), H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 2, H371

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Apply artificial respiration with bag and mask if breathing stopped. Get immediate medical advice/attention.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Get immediate medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion : Ingestion is not considered a potential route of exposure.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Fatal if inhaled. Corrosive to the respiratory tract. May cause damage to organs (lungs) (Inhalation).

Symptoms/effects after skin contact : Causes severe skin burns and eye damage.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : Ingestion is not considered a potential route of exposure.

Symptoms/effects upon intravenous administration	:	Not known.
Chronic symptoms	:	Adverse effects not expected from this product.
Most important symptoms and effects, both acute and delayed	:	Prolonged exposure to small concentrations may result in pulmonary oedema. May cause severe chemical burns to skin and cornea. Suitable first-aid treatment should be immediately available. Seek medical advice before using product. Delayed adverse effects possible. Refer to section 11.

4.3. Immediate medical attention and special treatment, if necessary

If you feel unwell, seek medical advice. If breathing is difficult, give oxygen.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	:	Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	:	Do not use water jet to extinguish.

5.2. Specific hazards arising from the chemical

Fire hazard	:	The product is not flammable.
Explosion hazard	:	Product is not explosive. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Reactivity	:	Reacts with water to form corrosive acids.
Hazardous combustion products	:	None that are more hazardous than the product itself.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	:	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.
Protection during firefighting	:	Standard protective clothing and equipment (e.g, Self Contained Breathing Apparatus) for fire fighters. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate ventilation.

6.1.1. For non-emergency personnel

Protective equipment	:	Wear protective equipment consistent with the site emergency plan.
Emergency procedures	:	Evacuate personnel to a safe area. Close doors and windows of adjacent premises. Keep containers closed. Mark the danger area. Seal off low-lying areas. Keep upwind.

6.1.2. For emergency responders

Protective equipment	:	Standard protective clothing and equipment (e.g, Self Contained Breathing Apparatus) for fire fighters. Equip cleanup crew with proper protection.
Emergency procedures	:	Evacuate and limit access. Ventilate area.

6.2. Environmental precautions

Try to stop release if without risk.

6.3. Methods and material for containment and cleaning up

For containment	:	Try to stop release if without risk.
Methods for cleaning up	:	Dispose of contents/container in accordance with local/regional/national/international regulations.
Methods and material for containment and cleaning up	:	Hose down area with water. Ventilate area. Wash contaminated equipment or sites of leaks with copious quantities of water.

6.4. Reference to other sections

See also Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Pressurized container: Do not pierce or burn, even after use. Use only with equipment rated for cylinder pressure. Close valve after each use and when empty.
Precautions for safe handling	:	Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area.
Hygiene measures	:	Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Comply with applicable regulations.
Storage conditions	:	Do not expose to temperatures exceeding 52 °C/ 125 °F. Keep container closed when not in use. Protect cylinders from physical damage; do not drag, roll, slide or drop. Store in well ventilated area. Store locked up.
Incompatible products	:	None known.
Incompatible materials	:	Flammable materials. Combustible materials. Reducing agents.
Storage temperature	:	< 52 °C
Conditions for safe storage, including any incompatibilities	:	Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Container valve guards or caps should be in place. Containers should be stored in the vertical position and properly secured to prevent them from falling over. Stored containers should be periodically checked for general condition and leakage. Keep container below 50°C in a well ventilated place. Segregate from flammable gases and other flammable materials in store. Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Nitric Oxide (10102-43-9)		
ACGIH	ACGIH TWA (ppm)	25 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	30 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	25 ppm
IDLH	US IDLH (ppm)	100 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	30 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	25 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls	:	Ensure exposure is below occupational exposure limits (where available). Provide adequate general and local exhaust ventilation. Systems under pressure should be regularly checked for leakages. Consider the use of a work permit system e.g. for maintenance activities. Alarm detectors should be used when toxic gases may be released.
Environmental exposure controls	:	Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear working gloves when handling gas containers. 29 CFR 1910.138: Hand protection. Wear chemically resistant protective gloves when making or breaking process connections.

Eye protection:

Wear safety glasses with side shields. Wear goggles and a face shield when transfilling or breaking transfer connections. 29 CFR 1910.133: Eye and Face Protection

Skin and body protection:

Wear suitable protective clothing, e.g. lab coats, coveralls or flame resistant clothing.

Respiratory protection:

Wear a respirator when performing non-routine tasks not limited to line breaking or sampling. Wear a respirator during routine operations if determined to be necessary during a process-specific review. Consult respirator suppliers' product information or their representatives for the selection of the appropriate respirator. See Sections 5 & 6.

Thermal hazard protection:

None necessary during normal and routine operations.

Other information:

Wear safety shoes while handling containers. Keep suitable chemically resistant protective clothing readily available for emergency use. 29 CFR 1910.136: Foot Protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Gas
Appearance	:	Clear, colorless gas.
Color	:	Colorless
Odor	:	Pungent.
Odor threshold	:	No data available
pH	:	Not applicable.
Melting point	:	No data available
Freezing point	:	-164 °C
Boiling point	:	No data available
Critical temperature	:	-93 °C
Critical pressure	:	6480 kPa
Flash point	:	Not applicable (non-flammable gas)
Relative evaporation rate (butyl acetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	Not applicable for gases and gas mixtures.
Flammability (solid, gas)	:	See Section 2.1 and 2.2
Vapor pressure	:	26000 mm Hg (at 20 °C)
Relative vapor density at 20 °C	:	1.04
Relative density	:	1.3
Specific gravity / density	:	1.04 g/cm³
Molecular mass	:	30.01 g/mol
Relative gas density	:	Similar to air
Solubility	:	Water: No data available
Log Pow	:	Not applicable for inorganic gases.
Auto-ignition temperature	:	Not applicable.
Decomposition temperature	:	No data available
Viscosity, kinematic	:	Not applicable.
Viscosity, dynamic	:	Not applicable.
Explosion limits	:	Not applicable (non-flammable gas)
Explosive properties	:	Not applicable (non-flammable gas).
Oxidizing properties	:	Not combustible but enhances combustion of other substances. May cause or intensify fire; oxidizer.
Ci	:	0.26

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with water to form corrosive acids.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

Violently oxidises organic material. May react violently with reducing agents.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

May react violently with reducing agents. May react violently with combustible materials. Air.

10.6. Hazardous decomposition products

Decomposes at room temperature to other nitrogen oxides and nitrogen. Oxidises in air to form nitrogen dioxide which is extremely reactive.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation:gas: Fatal if inhaled.

Nitric Oxide (10102-43-9)	
LC50 inhalation rat (ppm)	57.5 ppmV/4h
ATE US (gases)	57.500 ppmV/4h

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: Not applicable.

Serious eye damage/irritation : Causes serious eye damage.
pH: Not applicable.

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : May cause damage to organs (lungs) (Inhalation).

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : Fatal if inhaled. Corrosive to the respiratory tract. May cause damage to organs (lungs) (Inhalation).

Symptoms/effects after skin contact : Causes severe skin burns and eye damage.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : Ingestion is not considered a potential route of exposure.

Symptoms/effects upon intravenous administration : Not known.

Chronic symptoms : Adverse effects not expected from this product.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No data available.

12.2. Persistence and degradability

Nitric Oxide (10102-43-9)	
Persistence and degradability	Not applicable for inorganic gases.

12.3. Bioaccumulative potential

Nitric Oxide (10102-43-9)	
Log Pow	Not applicable for inorganic gases.
Bioaccumulative potential	No data available.

12.4. Mobility in soil

Nitric Oxide (10102-43-9)	
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.

12.5. Other adverse effects

Effect on ozone layer : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded.

Product/Packaging disposal recommendations : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for more guidance on suitable disposal methods.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1660 Nitric oxide, compressed, 2.3 (5.1;8)

UN-No.(DOT) : UN1660

Proper Shipping Name (DOT) : Nitric oxide, compressed

Class (DOT) : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115

Subsidiary risk (DOT) : 5.1 - Class 5.1 - Oxidizer 49 CFR 173.128,8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 2.3 - Poison gas
5.1 - Oxidiser
8 - Corrosive

DOT Packaging Non Bulk (49 CFR 173.xxx) : 337

DOT Packaging Bulk (49 CFR 173.xxx) : None

DOT Special Provisions (49 CFR 172.102) : 1 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone A (see 173.116(a) or 173.133(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.
B37 - The amount of nitric oxide charged into any tank car tank may not exceed 1,379 kPa (200 psig) at 21 C (70 F).
B46 - The detachable protective housing for the loading and unloading valves of multi-unit tank car tanks must withstand tank test pressure and must be approved by the Associate Administrator.
B50 - Each valve outlet of a multi-unit tank car tank must be sealed by a threaded solid plug or a threaded cap with inert luting or gasket material. Valves must be of stainless steel and the caps, plugs, and valve seats must be of a material that will not deteriorate as a result of contact with the lading.
B60 - DOT Specification 106A500X multi-unit tank car tanks that are not equipped with a pressure relief device of any type are authorized. For the transportation of phosgene, the outage must be sufficient to prevent tanks from becoming liquid full at 55 C (130 F).
B77 - Other packaging are authorized when approved by the Associate Administrator.

DOT Packaging Exceptions (49 CFR 173.xxx) : None

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : Forbidden

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : Forbidden

DOT Vessel Stowage Location : D - The material must be stowed ‘‘on deck only’’ on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.

DOT Vessel Stowage Other : 40 - Stow ‘‘clear of living quarters’’,89 - Segregation same as for oxidizers,90 - Stow ‘‘separated from’’ radioactive materials

Emergency Response Guide (ERG) Number : 124

Other information : No supplementary information available.

Special transport precautions	:	Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: - Ensure there is adequate ventilation. - Ensure that containers are firmly secured. - Ensure cylinder valve is closed and not leaking. - Ensure valve outlet cap nut or plug (where provided) is correctly fitted. - Ensure valve protection device (where provided) is correctly fitted.

Transportation of Dangerous Goods

Transport document description	:	UN1660 NITRIC OXIDE, COMPRESSED, 2.3 (5.1;8)
UN-No. (TDG)	:	UN1660
Proper Shipping Name	:	NITRIC OXIDE, COMPRESSED
TDG Primary Hazard Classes	:	2.3 - Class 2.3 - Toxic Gas.
TDG Subsidiary Classes	:	5.1;8
TDG Special Provisions	:	23 - (1) A consignor of these dangerous goods must include, except for UN1005, ANHYDROUS AMMONIA, the words “toxic by inhalation” or “toxic — inhalation hazard” or “toxique par inhalation” or “toxicité par inhalation” in the following places, unless the words are already part of the shipping name: (a)on a shipping document, immediately after the description of the dangerous goods; (b)on a small means of containment, next to the shipping name of the dangerous goods; and (c)on a large means of containment, next to the placard for the primary class of the dangerous goods or the placard for the subsidiary class, if any. For example, the notation on a shipping document would be “UN1935, CYANIDE SOLUTION, N.O.S, Class 6.1, PG I, toxic by inhalation”. (2) This special provision does not apply to a person who transports these dangerous goods in accordance with an exemption set out in sections 1.15, 1.17 or 1.17.1 of Part 1 (Coming Into Force, Repeal, Interpretation, General Provisions and Special Cases). (3) A consignor of UN1005, ANHYDROUS AMMONIA, must include the words “inhalation hazard” or “dangereux par inhalation”: (a)on a shipping document, immediately after the shipping name of the dangerous goods; and (b)on a small means of containment, next to the shipping name of the dangerous goods. When UN1005, ANHYDROUS AMMONIA, is contained in a large means of containment on which is affixed the anhydrous ammonia placard, the words “Anhydrous Ammonia, Inhalation Hazard” or “Ammoniac anhydre, dangereux par inhalation” must be displayed next to the placard in accordance with paragraph 4.18.2(b). SOR/2014-306,38 - A person must not handle, offer for transport or transport these dangerous goods in a large means of containment if they are in direct contact with the large means of containment. SOR/2014-306
ERAP Index	:	25
Explosive Limit and Limited Quantity Index	:	0
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	:	Forbidden
Passenger Carrying Ship Index	:	Forbidden

Transport by sea

Transport document description (IMDG)	:	UN 1660 Nitric oxide, compressed, 2
UN-No. (IMDG)	:	1660
Proper Shipping Name (IMDG)	:	Nitric oxide, compressed
Class (IMDG)	:	2 - Gases

Air transport

Transport document description (IATA)	:	UN Forbidden
UN-No. (IATA)	:	Forbidden

SECTION 15: Regulatory information

15.1. US Federal regulations

Nitric Oxide (10102-43-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302	
CERCLA RQ	10 lb releases to the air in amounts <1000 pounds per 24 hours which are the result of combustion and combustion-related activities are exempt from the notification requirements per 40 CFR 302.6
Section 302 EPCRA Reportable Quantity (RQ)	10 lb releases to the air in amounts <1000 pounds per 24 hours which are the result of combustion and combustion-related activities are exempt from the notification requirements per 40 CFR 355.31
SARA Section 302 Threshold Planning Quantity (TPQ)	100 lb

15.2. International regulations

CANADA

Nitric Oxide (10102-43-9)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Nitric Oxide (10102-43-9)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Nitric Oxide (10102-43-9)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on the Canadian IDL (Ingredient Disclosure List) Listed on INSQ (Mexican National Inventory of Chemical Substances) Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

Nitric Oxide (10102-43-9)	
State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information : This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product.

Full text of H-phrases:

H270	May cause or intensify fire; oxidizer
H280	Contains gas under pressure; may explode if heated
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H330	Fatal if inhaled
H371	May cause damage to organs

SDS US (GHS HazCom 2012)

This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of Air Liquide USA LLC and its affiliates' knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this product is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.