Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name

Non-Flammable Gas Mixture Containing Methane (<=10%) and

Argon (Balance)

Product Code

• MSDS No.: 30034

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

Relevant identified use(s)

• For general analyitical/synthetic chemical uses.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Air Liquide

2700 Post Oak Blvd. Houston, TX 77056 United States www.us.airliquide.com

www.us.airliquide.com sds@airliquide.com

Telephone (Technical) • 713-896-2896 Telephone (Technical) • 800-819-1704

1.4 Emergency telephone number

Manufacturer

• 800-424-9300 - CHEMTREC

Manufacturer

+1 703-527-3887 - Outside United States

Section 2: Hazards Identification

EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010] According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP

Compressed Gas - H280

DSD/DPD

Not classified

2.2 Label Elements

CLP

WARNING



Hazard statements • H280 - Contains gas under pressure; may explode if heated

Precautionary statements

Storage/Disposal • P403 - Store in a well-ventilated place.

DSD/DPD

Risk phrases . No label element(s) required

2.3 Other Hazards

CLP

This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces. According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

DSD/DPD

This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces. According to European Directive 1999/45/EC this material is considered dangerous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012

Compressed Gas - H280 Simple Asphyxiant

2.2 Label elements

OSHA HCS 2012

WARNING



Hazard statements . Contains gas under pressure; may explode if heated - H280 May displace oxygen and cause rapid suffocation.

Precautionary statements

Storage/Disposal . Store in a well-ventilated place. - P403

2.3 Other hazards

OSHA HCS 2012

Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS

Compressed Gas - A

2.2 Label elements

WHMIS



Compressed Gas - A

2.3 Other hazards

WHMIS

This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces. In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

2.4 Other information

NFPA



Section 3 - Composition/Information on Ingredients

3.1 Substances

 Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

			Comp	osition
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive
	CAS:74-82-8			EU DSD/DPD: Annex I - F+; R12
Methane	EC Number:200-812-7	< 10%	NDA	EU CLP: Annex VI - Flam. Gas 1, H220; Press. Gas - Comp., H280
	EU Index:601-001-00-4			OSHA HCS 2012: Flam. Gas 1; Press. Gas - Comp; Simp. Asphyx.
	CAS:7440-37-1			EU DSD/DPD: Not Classified
Argon	EC Number:231-147-0	Balance	NDA	EU CLP: Self Classified - Press. Gas - Comp., H280
	LO Number .231-147-0			OSHA HCS 2012: Press. Gas - Comp.

See Section 16 for full text of H-statements and R-phrases.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

 Although exposure is unlikely, in case of contact immediately flush skin with running water. If skin irritation develops get medical advice/attention.

Eye

 First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If irritation develops and persists, get medical attention.

Ingestion

Ingestion is not considered a potential route of exposure.

4.2 Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

All treatments should be based on observed signs and symptoms of distress in the
patient. Consideration should be given to the possibility that overexposure to materials
other than this product may have occurred. A potential health hazard associated with
this gas is anoxia.

4.4 Other information

 Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF EXPOSURE TO GASES WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. At a minimum, Self-Contained Breathing Apparatus must be worn. Victim(s) who experience any adverse effect after over-exposure to this gas mixture must be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of the label and the MSDS to physician or other health professional with victim(s).

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media . Use extinguishing agent suitable for type of surrounding fire.

Unsuitable Extinguishing Media

No data available

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

 Containers may explode when heated. Ruptured cylinders may rocket.

Hazardous Combustion Products

No data available

5.3 Advice for firefighters

 Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Always wear thermal protective clothing when handling refrigerated/cryogenic liquids. Wear positive pressure self-contained breathing apparatus (SCBA).

Move containers from fire area if you can do it without risk.

FIRE: If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

FIRE INVOLVING TANKS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

FIRE INVOLVING TANKS: Cool containers with flooding quantities of water until well after fire is out.

FIRE INVOLVING TANKS: Do not direct water at source of leak or safety devices; icing may occur.

FIRE INVOLVING TANKS: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

FIRE INVOLVING TANKS: ALWAYS stay away from tanks engulfed in fire.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

 Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material. Ventilate the area before entry.

Emergency Procedures

 Stop leak if you can do it without risk. Keep unauthorized personnel away. Keep out of low areas. Stay upwind. Do not direct water at spill or source of leak. LARGE SPILL: Consider initial downwind evacuation for at least 500 meters (1/3 mile)

6.2 Environmental precautions

Prevent spreading of vapors through sewers, ventilation systems and confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

Stop leak if you can do it without risk.
 Do not direct water at spill or source of leak.

Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.

If possible, turn leaking containers so that gas escapes rather than liquid.

Isolate area until gas has dispersed. Ventilate the area.

6.4 Reference to other sections

 Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

• Use only with adequate ventilation. Ventilate closed spaces before entering. Be aware of any signs of dizziness or fatigue, especially if work is done in a poorly ventilated area; exposures to fatal concentrations of this gas mixture could occur without any significant warning symptoms, due to olfactory fatigue or oxygen deficiency. Wear appropriate personal protective equipment, avoid direct contact. Cylinders should be firmly secured to prevent falling or being knocked-over. Do not attempt to repair, adjust, or in any other way modify cylinders. If there is a malfunction or another type of operational problem, contact nearest distributor immediately. Empty containers retain product residue and can be hazardous. Do not cut, weld, puncture or incinerate container.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Store in a cool, dry, well-ventilated place. Protect cylinders against physical damage.
 Cylinders should be firmly secured to prevent falling or being knocked-over.

7.3 Specific end use(s)

Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

			Exposure Limits	s/Gui	idelines		
	Result	ACGIH	Canada Ontario		Ireland	Israel	Portugal
Methane (74-82-8)	TWAs	1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4)	1000 ppm TWA	1000) ppm TWA	1000 ppm TWA (gas, listed under Aliphatic hydrocarbon gases: Alkane C1-4)	1000 ppm TWA [VLE- MP]
		Ex	posure Limits/Gu	ıideli	nes (Con't.)		
			Result		Spain		
Methane (74-82-8)			TWAs		1000 ppm TWA [ED]	VLA-	

Exposure Control Notations

Ireland

•Methane (74-82-8): Simple Asphyxiants: (Asphyxiant)

•Argon (7440-37-1): Simple Asphyxiants: (Asphyxiant)

Spain

•Argon (7440-37-1): Simple Asphyxiants: (simple asphyxiant)

8.2 Exposure controls

Engineering Measures/Controls

 Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

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 symptoms are experienced.

Eye/Face Skin/Body

Controls

- Wear safety glasses.
- Environmental Exposure
- Wear leather gloves when handling cylinders.
- Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Gas	Appearance/Description	Colorless compressed gas with no odor.
Color	Colorless	Odor	Odorless
Odor Threshold	None		
General Properties		-	
Boiling Point	-185.9 C(-302.62 F) Argon	Melting Point	-189.2 C(-308.56 F) Argon
Decomposition Temperature	Data lacking	рН	Not relevant
Specific Gravity/Relative Density	Data lacking	Density	0.103 lb(s)/ft³ @ 21.1 C(69.98 F) Argon
Water Solubility	0.056 % @ 0 C(32 F) Argon	Viscosity	Data lacking
Explosive Properties	Data lacking	Oxidizing Properties:	Data lacking
Volatility		·	
Vapor Pressure	Not relevant	Vapor Density	1.38 Air=1 Argon
Evaporation Rate	Not relevant		
Flammability		•	
Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Flammable gas.		
Environmental		-	
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Excess heat.

10.5 Incompatible materials

 Methane is incompatible with strong oxidizers (i.e. chlorine, bromine pentafluoride, oxygen difluoride, and nitrogen trifluoride)

10.6 Hazardous decomposition products

 Methane will thermally decompose in air to generate carbon monoxide and carbon dioxide.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

GHS Properties	Classification
Acute toxicity	EU/CLP ◆ Classification criteria not met OSHA HCS 2012 ◆ Classification criteria not met
Aspiration Hazard	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	EU/CLP ◆ Classification criteria not met OSHA HCS 2012 ◆ Classification criteria not met
Germ Cell Mutagenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Skin sensitization	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
STOT-RE	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
STOT-SE	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Toxicity for Reproduction	EU/CLP ◆ Classification criteria not met OSHA HCS 2012 ◆ Classification criteria not met
Respiratory sensitization	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Serious eye damage/Irritation	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met

Potential Health Effects Inhalation

Acute (Immediate)

• This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces. If this material is released in a small, poorly ventilated area (i.e. an enclosed or confined space), an oxygen-deficient environment may occur. Individuals breathing such an atmosphere may experience symptoms which include headaches, ringing in ears, dizziness, drowsiness, unconsciousness, nausea, vomiting, and depression of all the senses. Under some circumstances of over-exposure, death may occur. The following effects associated with decreased levels of oxygen: increase in breathing and pulse rate, emotional upset, abnormal fatigue, nausea, vomiting, collapse, loss of consciousness, convulsive movements, respiratory collapse and death.

Chronic (Delayed)

No data available

Skin

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.
- **Chronic (Delayed)**
- Under normal conditions of use, no health effects are expected.

Eye

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.
- **Chronic (Delayed)**
- Under normal conditions of use, no health effects are expected.

Ingestion

Acute (Immediate)
Chronic (Delayed)

- Ingestion is not anticipated to be a likely route of exposure to this product.
- Ingestion is not anticipated to be a likely route of exposure to this product.

Section 12 - Ecological Information

12.1 Toxicity

Material data lacking.

12.2 Persistence and degradability

Material data lacking.

12.3 Bioaccumulative potential

Material data lacking.

12.4 Mobility in Soil

Material data lacking.

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment has not been conducted for this material.

12.6 Other adverse effects

No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1956	Compressed gas, n.o.s. (Methane, Argon)	2.2	NDA	NDA

TDG	UN1956	COMPRESSED GAS, N.O.S. (Methane, Argon)	2.2	NDA	NDA
IMO/IMDG	UN1956	COMPRESSED GAS, N.O.S. (Methane, Argon)	2.2	NDA	NDA

14.6 Special precautions for user

Cylinders should be transported in a secure position, in a well-ventilated vehicle. The
transportation of compressed gas cylinders in automobiles or in closed-body vehicles
can present serious safety hazards. If transporting these cylinders in vehicles, ensure
these cylinders are not exposed to extremely high temperatures (as may occur in an
enclosed vehicle on a hot day). Additionally, the vehicle should be well-ventilated
during transportation.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

. Not relevant.

Section 15 - Regulatory Information

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

SARA Hazard Classifications • Pressure(Sudden Release of), Acute

State Right To Know				
Component	CAS	MA	NJ	PA
Argon	7440-37-1	Yes	Yes	Yes
Methane	74-82-8	Yes	Yes	Yes

			Inventory				
Component	CAS	Canada DSL	Canada NDSL	Chin	a	EU EINECS	EU ELNICS
Argon	7440-37-1	Yes	No	Yes		Yes	No
Methane	74-82-8	Yes	No	Yes		Yes	No
			Inventory (Co	n't.)			
Component			CAS		TSC	Α	
Argon		74	40-37-1		Yes	S	
Methane		74	-82-8		Yes	3	

Canada

		bor Canada - WHMIS - Classifications of Substances
A	7440-37-1	• Argon
A, B1	74-82-8	Methane
		Canada - WHMIS - Ingredient Disclosure List
Not Listed	7440-37-1	• Argon
Not Listed	74-82-8	Methane
	74-02-0	· Wethane

Environment

Canada - CEPA - Priority Substances List		
• Argon	7440-37-1 N	lot Listed
Methane	74-82-8	lot Listed

China

nvironment		
China - Ozone Depleting Substances - First Schedule		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
China - Ozone Depleting Substances - Second Schedule		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
China - Ozone Depleting Substances - Third Schedule		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
ther China - Annex I & II - Controlled Chemicals Lists		
	7440.07.4	No. 1 Second
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
China - Dangerous Goods List		
• Argon	7440-37-1	(compressed or refrigerate liquid)
Methane	74-82-8	(compressed or refrigerate liquid)
China - Export Control List - Part I Chemicals		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed

Europe

her		
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
• Argon	7440-37-1	Not Listed
• Methane	74-82-8	F+; R12
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	F+ R:12 S:(2)-9-16-33
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Pre	eparations	
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	S:(2)-9-16-33

Germany

Environment Germany - TA Luft - Types and Classes		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
Wethane	74-02-0	Not Listed
Germany - Water Classification (VwVwS) - Annex 1		ID N
• Argon	7440-37-1	ID Number 1348, not considered hazardous to water
Methane	74-82-8	ID Number 1343, not considered hazardous to water
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
Germany - Water Classification (VwVwS) - Annex 3		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
□ Other □		
Germany - Specifically Regulated Chemicals in TRGS		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
Portugal		
- Other -		
Portugal - Prohibited Substances		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
United Kingdom		
Environment United Kingdom - Pollution Inventory - Schedule 1 - Thresholds for Releases to	Δir	
• Argon	7440-37-1	Not Listed
Methane	74-82-8	10000 kg
Other United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review		
Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
United Kingdom - List of Dangerous Substances in Water		
Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
United States		
Labor U.S OSHA - Process Safety Management - Highly Hazardous Chemicals		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed

U.S OSHA - Specifically Regulated Chemicals		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
vironment		
U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantition	es	
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA	RQs	
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
U.S CERCLA/SARA - Section 313 - Emission Reporting		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed

United States - California

Environment		
U.S California - Proposition 65 - Carcinogens List		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed

U.S California - Proposition 65 - Reproductive Toxicity - Male		
• Argon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed

United States - Pennsylvania

- Pennsylvania - RTK (Right to Know) - Environmental Hazard List		
gon	7440-37-1	Not Listed
Methane	74-82-8	Not Listed
- Pennsylvania - RTK (Right to Know) - Special Hazardous Substances		
gon	7440-37-1	Not Listed
ethane	74-82-8	Not Listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)

H220 - Extremely flammable gas

R12 - Extremely flammable.

Last Revision Date
Preparation Date
Disclaimer/Statement of
Liability

- 09/September/2014
- 09/September/2014
- To the best of Air Liquide's 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 gas mixture 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.

Key to abbreviations NDA = No Data Available