

## 国家危险化学品检测重点实验室 (浙江)



电话 (Tel): 0571 8352 7220 传真 (Fax): 0571 8352 7219 邮编 (Post code): 311215

地址(Add.): 中国杭州市萧山区建设三路 398 号

正本/ORIGIN

编号: TCH22011578 No: TCH22011578 日期: 2022-08-15 Date: 2022-08-15

ZAIQ-RF(HH)-01-19

# Safety Data Sheet



Applicant name: ZHEJIANG YONGHE REFRIGERANT CO., LTD.

**Product Name: REFRIGERANT GAS R290** 

Edit date: 2022-08-15

**Edit institution: Technology Center of Hangzhou Customs District** 

Approver: 7 12 3

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## 声明

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测)。复测以原样为准,复测维持原结论时,由申请方承担复测费。

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	1. Identification of substance
Product Name	PROPANE R290
Other Name	None
Chemical Name	PROPANE R290
Recommended Use	High pure grade R290 is used as temperature sensing medium. Premium grade and first grade R290 can be used as refrigerant and can replace R22.
Manufacturer	ZHEJIANG YONGHE REFRIGERANT CO., LTD.
Address	893 CENTURY AVENUE, QUZHOU, ZHEJIANG. / 324000
Phone Number	+86-570-3832561
Fax Number	None
WEB or E-mail	None
Emergency Phone	+86-570-3832776 or Call your nearest poison control centre
Number	
	2. Hazards identification
GHS classification	Flammable gases 1
GHS Pictograms	Gases under pressure (Liquefied gas)
Signal words	Danger
Hazard statements	H220:Extremely flammable gas H280:Contains gas under pressure;may explode if heated
Precautionary Statement	P210: Keep away from heat, hot surfaces, sparks, open flames
Prevention	and other ignition sources. No smoking.
Precautionary Statement	P377:Leaking gas fire: Do not extinguish, unless leak can be
Response	stopped safely.
	P381:In case of leakage, eliminate all ignition sources.
Precautionary Statement	P403:Store in a well-ventilated place.
Storage	P410+P403:Protect from sunlight. Store in a well-ventilated
	place.
Precautionary Statement	None.
Disposal	
Other hazards which do not result in classification	Not available.

## 3. Composition/information on ingredients

J	Su	b	sta	n	ces

□Mixtures

**Component Information** 

Component	CAS number	EINECS number	Mass(%)
PROPANE R290	74-98-6	200-827-9	>99%wt

Note:1. Unless a component presents a severe hazard, it does not need to be considered in the SDS if the concentration is less than 1%.

the concentration is less than 1%.			
4.First-aid measures			
NOTE TO PHYSICIAN	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Avoid breathing vapors or fumes, avoid contact with skin, eyes and clothing, and provide adequate ventilation or exhaust in the work room.		
After inhalation	Move to fresh air. Oxygen or artificial respiration if needed. Get immediate medical attention.		
After skin contact	ON FROSTBITE: rinse with plenty of water, do NOT remove clothes. Refer for medical attention.		
After eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers. Get medical attention immediately.		
After ingestion	Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Loosen tight clothing such as a collar, tie, belt or waistband. Do not use mouth-to-mouth method if victim ingested the substance. Seek immediate medical attention.		
Most important symptoms/effects, acute and delayed	Acute poisoning by inhalation of 10% propane have mild dizziness; higher concentrations of propane has anesthetic effect, after inhalation appear dizziness, excitement, drowsiness, nausea, vomiting, salivation, slow pulse, low blood pressure, physiological reflex decrease, serious cause anesthesia. Contact with liquid propane can cause skin frostbite.		
	5. Fire-fighting measures		
Suitable extinguishing agents	If gas has ignited, do not attempt to extinguish it. If involved in fire, shut off flow immediately if it can be done without risk. Water spray, foam, carbon dioxide, dry chemical powder. Do not use water jet.		
Special hazards caused by the material, its products of combustion or flue gases	Can be released in case of fire: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).		
Protective equipment for fire-fighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.		
	6. Accidental release measures		
Person-related safety precautions	Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Check oxygen content before entering area. Turn leaking cylinder		

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	with the leak up to prevent escape of gas in liquid state. Keep unnecessary personnel away.
Measures for environmental protection	Prevent further leakage or spillage if safe to do so. Do not allow material to be released to the environment without proper
Management for	governmental permits.
Measures for cleaning/collecting	Small leakage, absorb by dry sand or inert adsorption material.  Large leakage, build a causeway, Isolate the leakage area until
clearning/ conecting	the gas is exhausted. Avoid open fire and high temperature. In case of large leakage, wear self-contained breathing apparatus (SCBA).
Additional information	See Section 7 for information on safe handling
	See section 8 for information on personal protection
	equipment.
	See Section 13 for information on disposal.
	7. Handling and storage
Handling	
Information for safe	Airtight operation, full ventilation. Operators must be specially
handling	trained and strictly abide by the operating procedures. Keep away from flammable and combustible materials. In case of
	high concentration contact, wear self-contained filter gas mask
	(half mask), general work clothes and general work protective
	gloves. Prevent gas leakage into workplace air. Avoid contact
	with oxidants. Handle with care to prevent the cylinder and
	accessories from being damaged. Provide leakage emergency treatment equipment.
Information about protection against	Keep away from heat/sparks/open flames/hot surfacesNo smoking.
explosions and fires	Do not spray on an open flame or other ignition source.  Do not pierce or burn, even after use.
	Use of explosion-proof lighting, ventilation facilities.
	Although the cylinders are equipped with pressure and
	temperature safety relief devices, under fire and high
	temperature conditions, they can still rupture and the product will decompose harmful HF.
STORAGE	
Requirements to be met	Full bottles and empty bottles should be placed separately and
by storerooms and	stored in a cool, ventilated and dry place.
containers	Do not store near combustibles, and avoid storing with salt or other corrosive substances.
To favorable and the	Keep away from fire, anti-static protection.
Information about	Unless the cylinder is connected to the point of use with a pipe,
storage in one common storage facility	the valve cap and valve outlet screw plug should be installed, and the cylinder should not be dragged, slipped, or rolled, and
Storage racinty	a hand truck should be used. A pressure reducing regulator
1	a manual di dont onio di di document prococure reducing regulator

should be used when connecting the cylinder to a low pressure line or system. It is absolutely not allowed to lift the cylinder cap. Install a one-way valve or trap on the discharge line to prevent harmful flow back to the cylinder. The cylinder should be stored vertically or securely fixed to prevent falling or impact. Full and empty bottles should be placed in separate areas and stored in a cool, ventilated and dry place. Do not store near combustibles, and avoid storing with strong oxidants, strong acids, strong bases, halogens.

Further information about No data.

storage conditions

## 8. Exposure controls/personal protection

Limit Values for Exposure					
Component	CAS number	ACGIH TLV-TWA	ACGIH TLV-STEL	NIOSH PEL-TWA	NIOSH PEL-STEL
PROPANE R290	74-98-6	4,508 mg/m <sup>3</sup>	N.E.	1,800 mg/m³	N.E.
Appropriate engineering controls	Airtight produ	ction proces	s, full ventila	ation.	
General protective and hygienic measures	Do not get this material on cloaccordance wi Wash hands b	othing. Avoidith good indu	d contact wi ustrial hygie	th eyes. Har ne and safet	ndle in ty practice.
Personal protective equipment Breathing equipment	Antistatic protective clothing, general operating protective gloves; self-contained filter mask, protective glasses.  When workers are facing high concentrations they must use appropriate certified respirators.				
Protection of hands Eye/Face protection	Wear appropriate chemical resistant gloves. Use safety glasses with side shields or safety goggles as mechanical barrier for prolonged exposure.				
Body protection	Full set of anti chemical reagent overalls, flame retardant antistatic protective clothing, choose body protection according to the amount and concentration of the dangerous substance at the work place.				

### Note: 1. N.E. means not established.

	9.Physical and chemical properties
Physical state	Liquid (liquefied gas , liquid at room temperature)
Colour	Colourless
Odour	Pure is odorless
Melting point/freezing point	-189.7 ℃
Boiling point or initial boiling point and boiling range	-42.1 ℃

**REFRIGERANT GAS R290** 

Flammability Flammable

Upper: 9.5 %(V), Lower: 2.1 %(V) Lower and upper

explosion limit/ flammability limit

-104 °C (Closed cup) Flash point

Auto-ignition 450 ℃

temperature

Decomposition No data available

temperature

pН Not applicable No data available Kinematic viscosity

Solubility Slightly soluble in water, soluble in ethanol, ether.

Partition coefficient: 2.36

n-octanol/water(log

value)

840 kPa (20 °C) Vapour pressure Density and/or relative 0.5 (water=1)

density

Relative vapour density 1.6

(air=1)

Particle characteristics Not applicable

10. Stability and reactivity

No data available. Reactivity

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous No data available.

reactions

Conditions to avoid (e.g. Heat and flame and spark. The extreme temperatures and

static discharge, shock or direct sunlight. Static discharge.

vibration)

Incompatible materials Avoid contact with strong oxidants, strong acids, strong bases,

halogens, etc.

Hazardous decomposition Carbon monoxide, carbon dioxide and unburned hydrocarbons

products (smoke).

11.Toxicological information

Routes of Entry: Dermal contact, eye contact, inhalation, ingestion.

**Acute Toxicity** 

PROPANE R290 (CAS LD50 (Oral, rat): N/A

LC50 (Inhalation, rat): 658 mg/l (4 h) 74-98-6)

LD50 (Dermal, rabbit): N/A

Not classified Skin corrosion/Irritation eye Not classified Serious

damage/irritation

Respiratory or skin

Not classified

sensitization

Germ cell mutagenicity
Carcinogenicity
Reproductive toxicity
STOT-single exposure
STOT-repeated exposure
Aspiration hazard
Chronic Effects
Not classified
Not classified
Not classified
Not classified

Further Information No data

12. Ecological information

Ecotoxicity

Aquatic Toxicity Test & Species

96 Hr LC50 Fish: N/A 48 Hr EC50 Daphnia: N/A 72 Hr EC50 Algae: N/A

Persistence and

degradability

Not available

Bioaccumulative potential Not available Mobility in soil Not available

Additional Information Not toxic to aquatic life.

13. Disposal considerations

### WASTE DISPOSAL INSTRUCTIONS

Contact a qualified professional waste disposal service to dispose of this material.

Dispose of in accordance with local environmental regulations or local authority requirements.

## 14. Transport information

The Recommendation of Transport of Dangerous Goods(TDG)

UN Number UN 1978
Proper Shipping Name PROPANE

Class/Division Division 2.1 Flammable Gases

Package Group —
Subsidiary risk —

labelling pictogram



Maritime transport IMDG/ Being same with TDG/No

Marine pollutant (Yes/No)

Air transport ICAO-TI and Being same with TDG

IATA-DGR See A1 for Special Provisions.

## 15. Regulatory information

**European/International Regulations** 

Hazardous by definition of Hazard Communication Standard OSHA:

(29CFR 1910.1200).

**EINECS Status:** This chemical is included in EINECS inventory. **EPA TSCA Status:** This chemical is included in TSCA inventory.

Canadian This chemical is included in DSL.

**DSL(Domestic Substances List):** 

**HMIS(Hazardous** Health: 0

**Material Identification** Flammability: 4 System Ratings): Physical hazard: 1 Personal protection: G

(4. Severe Hazard; 3. Serious Hazard; 2. Moderate Hazard; 1.

Slight Hazard; 0. Minimal Hazard)

A、B1. WHMIS (Canadian

**Workplace Hazardous Material Identification** System Ratings):

**GB 12268-2012 List of** This chemical is a dangerous goods on the GB 12268-2012 list

of dangerous goods. dangerous goods

### 16. other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment 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.

This Material Safety Data Sheet was based on the "Globally Harmonized System of Classification and Labelling of Chemicals", "Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations", "INTERNATIONAL MARITIME DANGEROUS GOODS CODE"," International Air Transport Association Dangerous Goods Regulations", the National Standards and other related dangerous chemicals management laws, regulations and standards, which are periodically updated and changed. To make dangerous goods / hazardous chemicals comply with the relevant requirements of the latest management, regularly update is recommended.

This Material Safety Data Sheet has been compiled in both English and Chinese. For any discrepancies, the Chinese version shall prevail.

ADR: European Agreement concerning the International Carriage of Abbreviations and

acronyms Dangerous Goods by Road

RID: Regulations Concerning the International Transport of

Dangerous Goods by Rail

IMDG: International Maritime Code for Dangerous Goods

IATA-DGR: Dangerous Goods Regulations by the "International Air

Transport Association" (IATA)

ICAO-TI: Technical Instructions by the "International Civil Aviation

Organization" (ICAO)

EINECS: European Inventory of Existing Commercial Chemical

Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

EC50: effective concentration, 50 percent

Edit Date 15.08.2022 Update and Revise Third edition

Edit Standard

Globally Harmonized System of Classification and Labelling of

Chemicals Part 1.5

Revised Institution Technology Center of Hangzhou Customs District



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# 化学品安全数据表



申请单位: 浙江永和制冷股份有限公司

产品名称: 丙烷(R290)

编制日期: 2022-08-15

编制机构: 杭州海关技术中心

批准人: 万旺季

注: 1.除非特别说明,本报告仅对样品负责。 2.未经本实验室许可,本报告不得部分复制。



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1. 标识

 其他名称
 无

 化学名称
 丙烷

使用建议 高纯级 R290 用作感温工质,优级和一级 R290 可作制冷剂替代 R22。

生产商 浙江永和制冷股份有限公司

地址 浙江省衢州市世纪大道 893 号/324000

固定电话 +86-570-3832561

传真 无 网址或电子邮件地址 无

应急电话 +86-570-3832776 或向离你最近的解毒中心求助

2. 危险标识

GHS 危险性分类 易燃气体 1 类

高压气体 (液化气体)

GHS 危险标签



信号词 危险

危险说明 H220:极易燃气体

H280:内装高压气体, 遇热可爆炸

防范说明 P210:远离热源、热表面、火花、明火和其他点火源。禁止吸烟。

预防

防范说明 P377:漏气着火: 置于通风良好处。切勿灭火,除非可安全堵住泄漏。

反应 P381:漏气时,去除一切点火源。

防范说明 P403:存放于凉爽/通风处

储存 P410+P403:防日晒, 存放于通风良好处

防范说明 无

**外**置

不导致分类的其他危险 未知

3. 成分构成/成分信息

√物质

□混合物

成分信息

成分CAS 号EINECS 号含量(%)丙烷74-98-6200-827-9>99%wt

注: 1.在化学品安全数据表中无需考虑百分含量小于 1%的成分,除非该成分呈现出严重的危害性。

4.急救措施

在呼吸急促的情况下,需给受害人输氧。保持受害人温暖。

对医师的建议 让受害人处于观察监护下。避免吸入蒸汽或烟雾,避免接触皮肤、眼睛

和衣服,在工作室内供应足够的通风或排风。

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吸入后	转移到有新鲜空气的地方。如需要,须输氧或进行人工呼吸。马上就医。
皮肤接触后	冻伤时:用大量水冲洗,不要脱去衣服。就医。
眼睛接触后	立即用大量的水冲洗眼睛至少 15 分钟。用手指分开眼睑以保证充分冲
	洗眼睛。马上就医。
摄入后	无医师建议的情况下不要引吐。如果受害人需呕吐, 使其前倾以减少倒
	吸的危险。解松过紧的衣物,如领子、领带、皮带或腰带。不要使用嘴
	对嘴的方法实施救助。马上就医。
主要的症状和影响,包括急	急性中毒吸入 10%丙烷时有轻度头晕; 更高浓度的丙烷有麻醉作用,
性和迟发效应	吸入后出现头昏、兴奋、嗜睡、恶心、呕吐、流涎、脉缓、血压偏低、
	生理反射减弱等,严重时导致麻醉。皮肤接触液态丙烷可引起冻伤。
	5. 消防措施
合适的灭火剂	如果气体已经点燃,不要试图扑灭它。如果涉及火灾,在没有危险的情
	况下,立即切断火源。灭火剂:雾状水、泡沫、二氧化碳、干粉。不适
	合的灭火剂:水射流。
由物质本身或其燃烧产物、	在发生火灾时可能释放:一氧化碳,二氧化碳和未燃尽的碳氢化合物
烟气产生的特殊危险	(烟)。
消防人员的特殊防护设备	穿全套防护衣物,包括头盔,呼吸器,防护服和面罩。
	6. 泄漏应急处理
与人相关的安全防范措施	确保通风充分。移除所有点火源。防止蒸气累积到形成爆炸的浓度。在
	穿上合适的防护服前,请勿触摸损坏的容器或泄漏物。进入区域前检查
	氧含量。转动泄漏钢瓶使漏口朝上,防止液态气体逸出。请不相关人员
	撤离。
环境保护措施	如能做到应防止进一步的泄露和溢出。无相关政府许可,不允许把该物
	质释放到环境中。
清洁/收集措施	少量泄漏时,可采用干砂或惰性吸附材料吸收泄漏物; 大量泄漏时需筑
	堤控制。隔离泄露区直至气体散尽。避免明火和高温,如发生大量泄漏,
	需佩戴自给式呼吸器(SCBA)。
附加说明	关于安全操作的信息见第7部分
	关于个人防护设备的信息见第8部分
	关于处置的信息见第 13 部分
	<b>7.</b> 操作和存储
操作	
安全操作的信息	密闭操作,全面通风。操作人员必须经过专门培训,严格遵守操作规程。
	远离易燃、可燃物。高浓度接触时可佩戴自吸过滤式防毒面具(半面罩),
	穿一般作业工作服, 戴一般作业防护手套。防止气体泄漏到工作场所空
	气中。避免与氧化剂接触。搬运时要轻装轻卸,防止钢瓶及附件破损。
	配备泄漏应急处理设备。
防止爆炸和火灾的信息	远离热源/火花/明火/热表面。——禁止吸烟。
	勿喷洒在明火或其他点火源上。
	切勿穿孔或焚烧,即使不再使用。
	采用防爆型照明、通风设施。

虽然钢瓶上都装有压力和温度的安全释放装置, 但在火灾和高温条件

下,仍然会破裂,产品就会分解出有害的 HF。

存储

对储藏室和容器的要求满瓶和空瓶应区分放置,存放在阴凉、通风、干燥处。

不得靠近可燃物存放,避免和盐类或其他腐蚀性物质一起存放。

远离火源, 防静电保护。

关于储藏在普通存储设施中

的信息

除非钢瓶用管道连接到使用点之外,应装好阀帽和阀出口螺旋塞,不得拖拉,滑落,滚动钢瓶,应使用手推运货车。当连接钢瓶到低压管路或

系统时,应使用一只减压调节器。绝对不准吊钢瓶帽,在排出管线上装一只单向阀或捕集器以防有害物流回钢瓶,钢瓶应垂直存放或可靠固定,以防跌落或撞击。满瓶和空瓶应分区放置,存放在阴凉通风干燥处。

不得靠近可燃物存放, 避免和强氧化剂、强酸、强碱、卤素一起存放。

关于储藏条件进一步的信息 无其他说明。

## 8. 暴露控制/人身保护

暴露限值

成分 ACGIH 阈 ACGIH 阈 NIOSH 阈 NIOSH 阈 CAS 号 限值-时间加 限值-短时间 限值-时间加 限值-短时 权平均浓度 接触限值 权平均浓度 间接触限值 丙烷 4,508 1,800 74-98-6 N.E. N.E. mq/m<sup>3</sup> mg/m<sup>3</sup>

减少接触的工程控制方法 生产过程密闭,全面通风。

一般保护和卫生措施 不要让该物质与皮肤、衣物、眼睛接触。依据良好的工业卫生和安全条

例操作。在休息和一天工作结束前要洗手。

个人防护用品 防静电工作服,一般作业防护手套,自吸过滤式防毒面具,防护眼镜。

呼吸设备 当工人在高浓度的环境下工作时,必须使用合适的已认证的呼吸器。

双手保护 戴合适的耐化学腐蚀的手套。

眼睛/面部保护 使用带侧罩或安全眼镜的护目镜作为工人长期暴露的机械屏蔽。

身体保护 全套防化学试剂工作服,阻燃防静电防护服,防护设备的类型必须根据

特定工作场所中的危险物的浓度和含量来选择。

注:1. N.E. 就是还没有建立的意思。

### 9.物理和化学特性

物理状态 液体 (液化气体,室温下呈液态)

颜色
 气味
 熔点/凝固点
 沸点或初始沸点和沸程
 分型
 一42.1 ℃
 易燃性

上、下爆炸极限/易燃极限 上限: 9.5 %(V), 下限: 2.1 %(V)

闪点 -104 ℃ (闭杯)

自燃温度 450 ℃ 分解温度 无数据资料 pH 值 不适用 运动粘度 无数据资料

溶解性 微溶于水,溶于乙醇、乙醚

分配系数:正辛醇/水(对数 2.36

丙烷(R290)

值) 蒸汽压

840 kPa (20 °C)

密度和/或相对密度

0.5 (水=1)

相对蒸气密度(空气=1)

1.6

颗粒特征

不适用

10. 稳定性和反应活性 反应性 无数据资料。

化学稳定性

在推荐的贮存条件下稳定。

有害反应的可能性

无数据资料。

需避开的条件(如:静电放 热、火焰和火花。极端的温度和阳光直射。静电放电。

电, 震动等)

不相容的物质

避免和强氧化剂、强酸、强碱、卤素等接触。

有害分解产物

一氧化碳, 二氧化碳和未燃尽的碳氢化合物(烟)。

### 11.毒理学信息

进入人体内的途径: 皮肤接触、眼睛接触、吸入和摄入。

急性毒性

丙烷(CAS 74-98-6)

LD50 (口服, 大鼠): 未知

LC50(吸入, 大鼠): 658 mg/l(4 h)

LD50 (皮肤, 兔子): 未知

皮肤腐蚀/刺激

未分类

严重眼损伤/刺激

未分类

呼吸或皮肤敏化作用

未分类

生殖细胞致突变性

未分类

致癌性

未分类

生殖毒性

未分类

特定目标器官毒性-单次接触 未分类

吸入危险

特定目标器官毒性-重复接触 未分类

未分类

慢性影响

未分类

其他信息

无数据

### 12. 生态学信息

生态毒性

水生毒性

测试 & 物种

96 Hr LC50 鱼: 未知

48 Hr EC50 泽类: 未知

72 Hr EC50 藻类: 未知

持久性和降解性 未知

潜在的生物累积性

未知

土壤中的迁移性

未知

其他信息

对水生生物无生态毒性。

### 13. 废弃处置

#### 废物处置说明

联系一家有资质的专业废物处置机构来处置。

#### 按照当地的环境法规或地方当局的要求来进行处置。

## 14. 运输信息

联合国《关于危险货物运输的建议书 规章范本》(TDG)

 UN 编号
 UN 1978

 正式运输名称
 丙烷

危险类/项别 2.1 项 易燃气体

 包装类别

 次要危险性

危险性标签



国际海运危规 IMDG/海洋 与 TDG 的分类相同/否

污染物(是/否)

国际空运危规 ICAO-TI 与 TDG 的分类相同和 IATA-DGR 特殊规定详见 A1。

15. 法规信息

欧洲/国际法规

OSHA (美国职业安全和健 危险性根据危害通讯标准来编写 (29CFR 1910.1200).

康管理法):

**EINECS (欧洲现有商业化** 该化学品已被列入 EINECS 目录中。

学物质名录):

EPA TSCA(有毒物质控制 该化学品已被列入 TSCA 目录中。

法):

加拿大 **DSL(国内物质清** 该化学品已被列入 **DSL** 目录中。

单):

HMIS(危险品识别系统): 健康危害: 0

易燃性: 4 物理危害: 1 个人防护: G

(4. 极其严重危害; 3. 严重危害; 2. 中度危害; 1. 轻度危害; 0. 极小

危害)

WHMIS(加拿大工作场所 A、B1.

有害物质识别系统):

**GB 12268-2012 危险** 该化学品作为危险品被列入 GB 12268-2012 危险品清单。

品清单

16. 其他信息

雇主只能把本化学品安全数据表的信息当作他们所获其他信息的补充信息,并能独立判断此信息的适用性,以确保正确使用并保护雇员的健康和安全。此化学品安全数据表提供的信息并不具担保

化学品安全数据表第 6 页 共 6 页**丙烷(R290)**依据 GHS 第 9 修订版编写

作用,任何未按本化学品安全数据表使用产品、或与其他产品和操作过程同时使用本产品时产生的后果由用户自行承担。

本化学品安全数据表是根据《全球化学品统一分类和标签制度》,《联合国关于危险货物运输的建议书》,《国际海运危规》,国际航空运输协会《危险货物规则》和国家标准等相关危险化学品管理法律法规和标准进行编制,而上述法律法规和标准均会定期进行更新和变化。为使危险货物/危险化学品符合相关最新的管理要求,建议定期审核更新化学品安全数据表。

本化学品安全数据表分别以中、英文编制,在对中、英文本的理解上发生歧义时,以中文文本为准。

缩略语 ADR:《关于危险货物道路国际运输的欧洲协议》

RID:《关于危险货物铁路国际运输的规则》

IMDG: 国际海运危规

IATA-DGR: 国际航空运输协会《危险货物规则》(IATA) ICAO-TI: 国际民用航空组织《国际民航公约》(ICAO)

EINECS: 欧洲现有商业化学物质名录

CAS: 化学文摘号 LC50: 半数致死浓度 LD50: 半数致死剂量 EC50: 半数效应浓度

编制日期 2022.08.15

更新和修改 第 3 版

编制标准 全球化学品统一分类和标签制度 第 1.5 部分

编制机构 杭州海关技术中心