化学品安全数据单

一、标识

全球统一制度产品标识符：异己烷。
其它标识办法：/
化学品使用建议和使用限制：/
供货商的详细情况：东营市良信石油技术开发有限公司。
紧急电话号码： +8617810300898

二、危险标识

物质或混合物的分类：
易燃液体类别 2，皮肤腐蚀/刺激类别 2，生殖毒性类别 2，特定目标器官毒性——单次接触类别 3(麻醉效应) ，特定目标器官毒性——重复接触类别 2，吸入危险类别 1，危害水生环境(慢性)类别 2。
全球统一制度标签要素，包括防范说明：

信号词：危险。
危险说明：高度易燃液体和蒸气。造成皮肤刺激。怀疑可对生育能力或胎儿造成伤害。吞咽并进入呼吸道可能致命。可能引起昏昏欲睡或晕眩。长时间或反复接触会对器官造成损害。对水生生物有毒并具有长期持续影响。
防范说明：
预防：
远离热源、热表面、火花、明火和其他点火源。禁止吸烟。保持容器密闭。货箱和装载设备接地并等势联接。使用防爆的【电气/通风/照明/……】设备。使用不产生火花的工具。采取行动防止静电放电。戴防护手套/穿防护服/戴防护眼罩/戴防护面具/戴听力防护装置。作业后彻底清洗…… 不要吸入粉尘/烟/气体/烟雾/蒸气/喷雾。只能在室外或通风良好之处使用。使用前取得专用说明。在阅读并明了所有安全措施前切勿搬动。避免释放到环境中。
反应：
万一起火，使用泡沫、化学干粉、水雾等灭火。如误吞咽：立即呼叫解毒中心或医生/……。不得诱导呕吐。如误吸入：将受害人转移到空气新鲜处，保持呼吸舒适体位。如感觉不适，呼叫解毒中心或医生/……。如皮肤（或头发）沾染：立即脱掉所有沾染的衣服。用水清洗皮肤/淋浴。具体治疗（见下文）。如发生皮肤刺激：求医/就诊。沾染的衣服清洗后方可重新使用。如接触到或有疑虑：求医/就诊。如感觉不适，求医/就诊。收集溢出物。
贮存：
存放于通风良好处。保持低温。保持容器密闭。存放处须加锁。
处置：
按照相关规定处置内装物和容器。
不导致分类的其他危险：/

三、组成/成分信息

化学名称	化学文摘社编号（CAS No.）	成分（由送检企业提供）
异己烷	107-83-5	98%
正己烷	110-54-3	1.5%
其他烃类	/	0.5%

四、急救措施

不同暴露途径的急救方法

吸入：迅速脱离现场至空气新鲜处。保持呼吸道通畅。如呼吸困难，给输氧。如呼吸停止，立即进行人工呼吸。就医。

皮肤接触：立即脱去所有被污染的衣物，包括鞋袜。用流动清水(如果可能，用肥皂)冲洗皮肤和头发；如有刺激感，应当就医。

眼睛接触：立即提起眼睑，用大量流动清水或生理盐水彻底冲洗至少 15 分钟。就医。

摄入：如果吞食，禁止催吐。尽可能立即就医。

最重要的急性和延迟症状/效应：/

必要时注明立即就医及所需的特殊治疗：/

五、消防措施

适当的灭火剂：可用雾状水、干粉、二氧化碳、泡沫灭火。

化学品产生的具体危险：液体和蒸气高度易燃。受热、接触明火或氧化剂，有严重的火灾危险。蒸气可能会飘散到离火源相当远的地方。受热可能引起膨胀或分解，导致容器急剧破裂。燃烧时可能产生有毒的一氧化碳(CO) 烟雾。

消防人员的特殊防护行动：佩戴呼吸设备和防护手套。采取一切可能的措施防止溢出物进入下水道或水道。考虑疏散人员(或采取现场防护)。再有充足防护的安全距离处灭火。如果可以保证安全，关掉电器，直至气体火灾危害被清除。用喷水雾的方法来控制火势，并冷却邻近区域。避免直接喷水到液池中。不要靠近可能灼热的容器。在有防护的位置喷水冷却暴露于火场中的容器。如果这么做安全的话，将容器从火场中移走。

六、意外释放措施

人身防范、保护设备和应急程序：清除所有点火源。立即清理所有泄漏物。避免接触皮肤和眼睛。使用采用防护装设备以控制人员接触。

环境防范措施：隔离泄漏污染区，限制出入。

抑制和清洁的方法和材料：在安全的前提下，阻止泄漏。喷水或水雾来驱散/吸收蒸气。用沙子、土或蛭石来吸收泄漏物。只能使用不产生火花的铲子和防爆设备。收集可回收的产品于贴有标签的容器中，以便回收利用。用沙子、土或蛭石来吸收残留物。收集固体残留物，密封于贴有标签的桶中，以便废弃处理。冲洗沾染区域，防止废水排入阴沟。如果阴沟或排水道被污染，报告应急处理部门。

七、搬运与储存

安全搬运的防范措施：防止所有接触，包括吸入。当有接触危险时，穿戴防护服。在通风良好的区域使用。防止本品在低洼处汇集。未作空气检测，禁止进入封闭空间内。禁止接触人体、食品或食品容器。避免接触不相容物料。操作处置时，禁止进食、饮水或吸烟。不使用时，保持容器安全密封。防止容器受到物理损伤。

安全存储的条件，包括任何不相容性：采用原装容器存放在经批准的防爆区域。禁止吸烟、明火、受热或接触点火源。禁止存放在凹坑、洼地、地下室或者蒸气能够汇聚的场所。保持容器安全密封。远离不相容材料，存储于阴凉、干燥、通风良好的地方。防止容器受到物理

损伤，并定期检查泄漏情况。遵从制造商储存和处理方面的建议。

八、接触控制/人身保护

控制参数：

紧急限制：

成分	TEEL-1	TEEL-2	TEEL-3
异己烷	1,000 ppm	11000 ppm	66000 ppm

适当的工程控制：对易燃液体和易燃气体，可能需要局部通风系统或工艺围栏通风系统。应使用防爆型通风设备。

个人保护措施

防护眼罩/面具：带侧框保护的安全眼镜。化学护目镜。

皮肤防护：戴化学防护手套(如聚氯乙烯手套)。穿安全鞋或安全靴(如橡胶材料)。

呼吸系统防护：充足容量的 AX 种过滤器。

高温危险：/

九、物理及化学性质

外观（物理状态、颜色等）	无色透明液体。
气味	/
气味阈值	/
pH 值	/
熔点/凝固点	-154℃。
初始沸点和沸腾范围	62.0℃。
闪点	≤18.0℃。
蒸发速率	/
易燃性（固体、气体）	高度易燃。
上下易燃极限或爆炸极限	上限：7.0%；下限：1.2%。
蒸气压力	24.0 kPa @ 21.1℃。
蒸气密度（空气=1）	3。
相对密度（水=1）	0.653。
可溶性	不互溶。
分配系数：正辛醇/水	/
自动点火温度	225℃。
分解温度	/
粘度	/

十、稳定及反应性

反应性：/

化学稳定性：在常温下稳定。

危险反应的可能性：不会发生危险的聚合反应。蒸气与空气形成爆炸性混合物。蒸气形式下接触明火或火花，有严重的爆炸危险。

应避免的条件：高温、热源、点火源等。

不相容材料：避免与氧化剂反应。

危险分解产物：二氧化碳 (CO_2)、有机物燃烧产生的其他典型热解产物。

十一、毒理学信息

暴露途径：吸入、经口、皮肤、眼睛。
有关物理、化学和毒理学特点的症状：/
急性毒性效应：
吸入蒸气可能引起瞌睡和头昏眼花。可能伴随嗜睡、警惕性下降、反射作用消失、失去协调性并感到眩晕。意外食入该物质可对个体健康造成伤害。吞咽液体可能呛入肺内并有化学性肺炎的风险，可能导致严重的后果。反复接触可能引起在正常操作和使用后，皮肤破裂、剥落、干燥。本物质能刺激并损害某些人的眼睛。
慢性毒性或长期毒性效应：反复或长期职业接触可能会产生涉及器官或生化系统累积性的健康影响。
毒性的数值度量（如急性毒性估计值）：/

十二、生态信息

毒性：

终点	测试持续时间 (小时)	种类	价值
LC50	96	鱼	1.915mg/L
EC50	96	藻类或其他水生植物	3.635mg/L

持久性和降解性：水/土壤：低 ； 空气：低。
生物累积潜力：低 (LogKOW = 3.2145)。
在土壤中的流动性：低 (KOC = 124.9)。
其它有害效应：/

十三、处置考虑

处置方法：尽量回收泄漏物。请联系制造商，咨询有关回收方法；如果无法找到治理或废弃设施，请联系县或地区的废弃物处理部门。对空容器进行去污处理。遵守标签上的所有安全说明，直至容器被清洗和销毁。

十四、运输信息

联合国编号：1208。
联合国正式运输名称：己烷。
运输危险分类：3。
包装类别（如果适用）：II。
环境危险：海洋污染物。
用户的特殊防范措施：/

十五、管理信息

国内化学品安全管理法规：本化学品安全数据单遵照了以下相关国家标准：GB/T 16483-2008、GB 13690-2009、GB 18218-2018、GB 15258-2009、GB 6944-2012、GB 190-2009、GB/T 191-2008、GB 12268-2012、GB/T 15098-2008、GBZ 2.1-2007、GBZ 2.2-2007 以及相关法规：《铁路危险货物运输管理规则》、《危险化学品安全管理条例》。

十六、其它信息

参考文献	联合国《关于危险货物运输的建议书•规章范本》 联合国《全球化学品统一分类和标签制度》
制表日期	2020-02-28

注 1：当产品为含有两种以上危险物质的混合物时，应依据其混合后的危险性，制作安全数据单。

注 2：制造商/供应商应根据实际情况确保安全数据单所含信息的正确性，并适时更新。

注 3：如由于产品特性而不存在或不可得某些信息时（如固体不存在沸点），应在表格中以“/”标识。

Chemical Safety Data Sheet

Section 1 IDENTIFICATION

GHS Product identifier: Isohexane.
Other means of identification: /
Recommended use of the chemical and restrictions on use: /
Supplier's details: Dongying Lianxin Petrochemical Technology Development Co., ltd
Emergency phone number: +8617810300898

Section 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:
Flammable Liquid Category 2.
Skin Corrosion/irritation Category 2.
Toxic to reproduction Category 2.
Specific Target Organ Toxicity - Single Exposure Category 3 (Narcotic Effects).
Specific target organ toxicity (repeated exposure) Category 2.
Aspiration Hazard Category 1.
Hazardous to the aquatic environment, long term hazard Category 2.
GHS Label elements, including precautionary statements:

Signal word: Danger.
Hazard statement(s): Highly flammable liquid and vapor. Causes skin irritation. Suspected of damaging fertility or the unborn child. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.
Precautionary statement(s):
Prevention：
Keep away from heat, hot surfaces, spars, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting/...] equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Wash … thoroughly after handling. Do not breathe dust/fume/gas/mist/ vapors/spray. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Avoid release to the environment.
Response：
In case of fire: Use foam, chemical powder，fog to extinguish. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Specific treatment (see below). If skin irritation occurs: Get medical advice/attention. And wash contaminated clothing before reuse. IF exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell.

Collect spillage.

Storage：

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal：

Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration%
Isohexane	107-83-5	98%
Hexane	110-54-3	1.5%
Other hydrocarbons	/	0.5%

Section 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If Ingestion: If swallowed do NOT induce vomiting. REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.

Most important symptoms/effects, acute and delayed: /

Indication of immediate medical attention and special treatment needed, if necessary: /

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Use water spray, chemical powder, CO_2, foam.

Special hazards arising from the chemical: Liquid and vapour are highly flammable. Severe fire hazard when exposed to heat, flame and/or oxidisers. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO).

Special protective actions for fire-fighters: Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water course. Consider evacuation (or protect in place). Fight fire from a safe distance, with adequate cover. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control the fire and cool adjacent area. Avoid spraying water onto liquid pools. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

Section 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment.

Environmental precautions: Do not enter into spillage area.

Methods and materials for containment and cleaning up: Stop leak if safe to do so. Water spray or fog may be used to disperse / absorb vapour. Contain spill with sand, earth or vermiculite. Use only spark-free shovels and explosion proof equipment. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.

Section 7 HANDLING AND STORAGE

Precautions for safe handling: Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.

Conditions for safe storage, including any incompatibilities: SStore in original containers in approved flame-proof area. No smoking, naked lights, heat or ignition sources. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. Keep containers securely sealed. Store away from incompatible materials in a cool, dry well ventilated area. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

EMERGENCY LIMITS：

Ingredient	TEEL-1	TEEL-2	TEEL-3
Isohexane	1,000 ppm	11000 ppm	66000 ppm

Appropriate engineering controls: For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant.

Individual protection measures

Eye/face protection: Safety glasses with side shields. Chemical goggles.

Skin protection: Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber.

Respiratory protection: Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent).

Thermal hazards: /

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour etc)	Colorless transparent liquid.
Odour	/
Odour Threshold	/
pH	/
Melting point/freezing point	-154℃。
Initial boiling point and boiling range	62.0℃。
Flash point	≤18.0℃。
Evaporation rate	/
Flammability (solid, gas)	HIGHLY FLAMMABLE.
Upper/lower flammability or explosive limits	Upper：7.0%；lower：1.2%.
Vapour pressure	24.0 kPa @ 21.1℃。
Vapour density（AIR=1）	3。
Relative density（WATER=1）	0.653。
Solubility(ies)	Immiscible
Partition coefficient: n-octanol/water	/
Auto-ignition temperature	225℃。
Decomposition temperature	/
Viscosity	/

Section 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: The material is stable in normal temperature.

Possibility of hazardous reactions: Hazardous polymerisation will not occur. Vapour forms an explosive mixture with air. Severe explosion hazard, in the form of vapour, when exposed to flame or spark.

Conditions to avoid: Heat, flames and sparks.

Incompatible materials: oxidizing agents.

Hazardous decomposition products: carbon dioxide (CO_2), other pyrolysis products typical of burning organic material.

Section 11 TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure: Inhaled, Ingestion, skin, eyes.

Symptoms related to the physical, chemical and toxicological characteristics: /

Acute health effects:

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo. Accidental ingestion of the material may be damaging to the health of the individual. Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of haemorrhaging, pulmonary oedema, progressing to chemical pneumonitis; serious consequences may result. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. The material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions.

Chronic health effects: Repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

Numerical measures of toxicity (such as acute toxicity estimates): /

Section 12 ECOLOGICAL INFORMATION

Toxicity:

ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE
LC50	96	Fish	1.915mg/L
EC50	96	Algae or other aquatic plants	3.635mg/L

Persistence and degradability: Water/Soil: LOW. Air: LOW.
Bioaccumulative potential: LOW (LogKOW = 3.2145).
Mobility in soil: LOW (KOC = 124.9).
Other adverse effects: /

Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Section 14 TRANSPORT INFORMATION

UN number: 1208.
UN proper shipping name: HEXANES.
Transport hazard class(es) : 3.
Packing group, if applicable: II.
Environmental hazards: marine pollutant.
Special precautions for user: /

Section 15 REGULATORY INFORMATION

Regulations：This safety data sheet is in compliance with the following national standards: GB/T 16483-2008, GB 13690-2009, GB 18218-2018, GB 15258-2009, GB 6944-2012, GB 190-2009, GB/T 191-2008, GB 12268-2012, GB/T 15098-2008, GBZ 2.1-2007, GBZ 2.2-2007 as well as the following regulations: Railway Dangerous Goods Transport Administrative Regulation, Dangerous Chemicals Safety Administrative Regulation.

Section 16 OTHER INFORMATION

References	“Model Regulations on the Transport of Dangerous Goods” “The Globally Harmonized System of Classification and Labelling of Chemicals”
Form Date	28-Feb-2020

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.
Note 2: Manufacturer / supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.
Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with "/" logo.