物料安全数据表 (MSDS)

Material Safety Date Sheet

1. 化学品及企业标识

Chemical Product and Company Identification

中文名称: 丁二醇

Chinese name: Butanediol

英文名称: Dihydroxybutane English

name: Dihydroxybutane

企业名称:河南开祥精细化工有限公司

Company name: HeNan KaiXiang JingXi Chemical Co.ltd.

企业地址:河南省义马市人民路西段 Company Adddress: YiMa, HeNan, China

邮政编码: 472300 Postal code: 472300

传真号码: 0398-2219109 Fax No.: 0398-2219109

联系电话: 0398-2219103 (销售)、0398-2219113 (安全)、0398-2219333 (生

产)

Tel No.: 0398-2219103 (Sales department) 0398-2219113 (safety

department) 0398-2219333 (Processing department)

2. 成份/组成信息

Composition /information on ingredients

组成	CAS No.	百分比	危险性
Ingredient		Weight %	Hazardous
丁二醇 Butanediol	110-63-4	~100%	有 Yes

3. 危险性概述

Hazard Indetification

紧急情况综述

Emergency overview

小心! 吞入有害。损害器官: 肝, 肾。

Caution! Be harmful if swallowed, cause liver and kidney damage

健康等级: 1一轻微。

Health Classification: 1-slightly

可燃性等级: 1一轻微。

Flammable Classification: 1-slightly

反应等级:无。

Reactivity Classification: None 实验室保护设施:实验室外套。 Lab Protective equipment: Lab coat 贮槽颜色标记: 黄色(普通贮槽)。

Storage tank color code: Yellow (General tank)

河南能源化工集团化工销售有限公司 HNEC Chemical Commercial Co., Ltd. 潜在的健康影响:无。

Potential health effects: None

吸 入:没有确定。

Inhalation: Not determined

吞 食:头痛、虚弱、昏迷、意识不清。

Ingestion: Headache, weakness, coma, unconsciousness

皮肤接触: 刺激性。 Skin contact: irritation 眼睛接触: 刺激性。 Eye contact: irritation

长期接触: 肝损害, 肾损害。

Chronic Exposure: cause liver and kidney damage

环境危害: 泄漏时对水中生物产生危害。

Environmental hazard: be harmful to animal or plant living in waterwhen leaking into the water

4、急救措施

First Aid measures:

吸 入: 如果大量吸入, 转移至新鲜空气充足的地方。

Inhalation: If a person breaths a large amounts of this material, remove t to fresh air

吞 食: 在医务人员指导下催吐,不要给意识不清的人吃东西。

Ingestion: Induce vomiting immediately as directed by medical personnel, never give

anything by mouth to an unconscious person

皮肤接触: 如果接触, 立即用肥皂和大量水冲洗至少15 分钟。

Skin contact: In case of contact, immediately wash skin with soap and plenty ofwater

for at least 15 minutes

眼 接 触:如果眼接触,立即用水冲洗至少15分钟。

Eye contact: In case of contact, immediately flush eyes with water for at least 15

minutes

5. 消防措施

Fire fighting measures

燃烧 Fire

闪点: 121℃ (250°F)

Flash point : 121 °C (250°F)

可燃性界限(按体积): 1.95-18.3

Flammable limits in air (by volume): 1.95-18.3

爆炸性: 无资料

Explosion: Not applicable

灭火介质: 化学干粉、二氧化碳、适合与周围情况的灭火介质。

Fire Extinguishing media: dry chemical powder, carbon dioxide or other media

appropriate to the surrounding fire

特殊的信息:消防队员应佩戴适当的防护设施,设备齐全的呼吸器械。

Special information: Fire fighters should wear proper protective

equipment, self-contained breathing apparatus

6. 泄漏应急处理:



Accidental release measures:

在发生泄漏时,首先熄灭所有明火、隔绝一切火源,防止发生燃烧和爆炸。 In the event of a leak or spill, firstly put out all the open flames, isolate all sources of ignition to prevent fire and explosion

处理人员需佩带要求的防护用品及防毒面具。

Personnel who handle accident should wear appropriate protective equipment and protective mask as requested.

避免进入下水道等密闭系统,应进行围杜泄漏液体并回收;剩余液体用吸收棉吸附。

Dike the leaking liquid for recovery to avoid flowing into closed system such as sewer. Absorb remaining liquid in absorbent cotton.

吸收棉进行回收; 不得用水冲洗, 防止污染区域扩大。

Recover collected liquid in absorbent cotton. Never flush away with water to prevent the expansion of contaminated area .

通知安全、环保、卫生等有关部门。

Inform the departments of safety, environmental protection, and sanitation etc.

7. 操作处置与贮存

Handling and storage

丁二醇应贮存在干燥、通风好的地方,并且要远离热、火花和明火。

1,4-Butanedio l should be stored in dry ,well-ventilated place away from heat,sparks ,and open flames .

打开后尽量一次使用完,或倒入具备储存条件的容器中。

1,4-Butanedio l should be used up one time after opening storage drum ,otherwise stored in the container which provided with protective measures

存贮设备应备呼吸阀、正压氮封,氮封用氮气露点应小于-40℃。

Breathing valve should be installed on the storage equipment which is padded with positive pressure nitrogen (due point no higher than -40 $^{\circ}$ C).

为了防止静电,运输容器要接地。

Electrically ground all shipping containers to prevent static discharge.

丁二醇空桶可能有危害,因为空桶内有少量剩余产品(气体,液体)。

The empty drum may be hazardous, for they retain small amounts of product(vapor , liquid) .

8. 接触控制和个人防护

Exposure control and personal protection

空气传播接触限制:没有制定。

Airborne Exposure Limits: Not Regulated.

通风系统: 稀释放空以控制丁二醇对人健康造成危害,如仍不行,则应安装通风装置。

Ventilation system: Ventilation can be used to control BDO hazard to personnel's health. If not, a local exhaust facilities should be installed

防毒面具:操作丁二醇时,如果与其接触明显,应请教工业卫生学者。在紧急情况或接触情况无法知道的情况下,可佩戴一定压力的面罩和空气供给式呼吸器。但在氧气缺乏的气体中,空气净化呼吸器不能保护工人。



Protective mask: In case of direct exposure to 1.4-Butanediol, consult industrial hygienist. In the event of emergencies or unknown exposure, personnel should wear a face mask with positive pressure and air—supplied respirator. But respirator can not protect the worker in oxygen—deficient area.

皮肤防护:佩戴防护手套和干净的防护服。

Skin protection: wear protective gloves and clean protective clothing. 眼 防 护: 在丁二醇可能泄漏的地方,佩戴化学安全护目镜和面罩。工作区应设有洗眼器和快速浸湿设施。

Eye protection: wear chemical goggles and face shield where leaking is possible. Maintain eye wash and quick-drench facilities in work

9、物理和化学特性

Physical and chemical properties

外 观: 无色粘稠状液体

Appearance: colorless viscous liquid

气味: 无味 Odor: odorless 比重: 1.017

Specific gravity: 1.017 水溶解性: 完全

Solubility in water: miscible

PH: 无资料

PH: No data available 体积不稳定性; N/A

Volatiles by volume: Not available

沸 点: 226~228℃

Boiling point: 226~228℃

熔点: 20℃

Melting point: 20℃ 气相密度: (AIR=1) Vapor density: (AIR=1)

10、稳定性和反应性 Stability and reactivity

稳 定 性: 普通条件操作和贮藏时稳定。

Stability: stable under normal handling and storage conditions

分解产品的危险物: 一氧化碳、 二氧化碳。

Hazardous decomposition products: Carbon monoxide, Carbon dioxide

聚合危险: 不会发生。

Hazardous polymerization: will not occur

不相容:强氧化剂、无机酸。

Incompatibility: strong oxidizing agents, mineral acid

避免条件:热、火焰、其它火源。

Avoid: heat, flames, other sources of ignition



11、毒理学资料

Toxicological Information

组成	己知的	预知的	IARC种类
Ingredient	known	anticipated	IARC Category
1,4-丁二醇 1,4-Butanediol	无 No	无 No	没有 None

12、生态学资料

Ecological Information

环境毁灭: 无

Environmental Fate: No data available.

环境毒性: 无

Environmental Toxicity: No data available.

13、废弃处置

Disposal Considerations

无论回收或重复利用,物料都应保存在适当的、经批准的废物处理设施里。可以在允许的地点掩埋,也可以进行焚烧处理。

Whatever for recovery or recycling, it should be stored in an appropriate and approved waste disposal facility. It can be buried at the permitted place or incinerated

14、运输资料

Transport Information

危险性分类:可燃液体。

Hazard classification: flammable liquid

包装方法: 充氮、正压包装。

Packaging: sealed with nitrogen under positive pressure

包装方式: 24m3罐装或2001 桶装。

Manner of packing: 24m3 tank car or 2001 drum

运输方式: 汽车或火车运输。为了防止静电,运输容器要接地。

Manner of Shipping: transported by car or train. The shipping containers should be grounded to prevent static discharge.

15、法规信息

Regulatory Information

无 None

16、其它信息

Other information

NFPA: 健康等级: 1 可燃性: 1 反应性: 0。

NFPA Ratings: Health: 1 Flammablility: 1 Reactivity: 0

防护措施:使用过程中避免接触眼、皮肤、衣服;操作后彻底清洗,不使用时保持容器紧闭。

Protective measures: Avoid contact with eye, skin and clothing during use. Wash thoroughly after handling, keep container tightly closed.

急救措施:如果吞入立即在医务人员指导下催吐,不要给意识不清的人吃东西; 一旦接触,立即用大量水冲洗眼或皮肤至少15分钟。

First-aid measure: If swallowed, induce vomitting immediately as directed by



medical personnel . Never give anything by mouth to an unconscious person . In case of contact , immediately flush eye or skin with plenty of water for at least 15 minutes .