CAS-No.: MSDS



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

:

Product code : B-02263

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial

For professional use only

Use of the substance/mixture : Laboratory chemicals

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bio-Chem Chemicals 5455, Nicholson Road Science Market, Ambala Cantt. 133001 Haryana (India)

+91-82952 41953

info@biofinechemical.com - www.biofinechemical.com

1.4. Emergency telephone number

Emergency number +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Flammable liquids, H225

Category 2

Serious eye damage/eye H319

irritation, Category 2

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

Safety Data Sheet

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS02 GHS0

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.

H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P370+P378 - In case of fire: Use dry extinguishing powder to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethanol	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5	95 - 99	Flam. Liq. 3, H226 Skin Corr. 1A, H314
DITHIOOXAMIDE AR	(CAS-No.) 79-40-3	0.1 - 1	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315 STOT SE 3, H335

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep

at rest in a position comfortable for breathing.

Safety Data Sheet

First-aid measures after skin contact : Wash with plenty of water/.... Remove affected clothing and wash all exposed skin

area with mild soap and water, followed by warm water rinse. Get immediate medical

advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

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

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Protection during firefighting : 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 : Remove ignition sources. No open flames. No smoking. Use special care to avoid

static electric charges.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes.

Do not breathe vapours. Take precautionary measures against static discharge. Provide good ventilation in process area to prevent formation of vapour. Use only

non-sparking tools.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed

areas with mild soap and water before eating, drinking or smoking and when leaving

work.

Safety Data Sheet

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Use

explosion-proof electrical/ventilating/lighting equipment.

Storage conditions : Keep in fireproof place. Keep container tightly closed.

Incompatible materials : Heat sources.

7.3. Specific end use(s) No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection : Protective gloves

Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing

Respiratory protection : [In case of inadequate ventilation] wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Orange coloured solution.

Odour : No data available

Odour threshold : No data available

pH : 7

Relative evaporation rate (butylacetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : 74 °C

Flash point : 12 °C

Auto-ignition temperature : 425

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : 59 hPa

Relative vapour density at 20 °C : No data available

Relative density : No data available

Safety Data Sheet

Density : 0.82

Solubility : No data available

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : 15 - 3.5 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Heat. Sparks.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Not classified

pH: 7

Serious eye damage/irritation : Causes serious eye irritation.

pH: 7

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Safety Data Sheet

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

 UN-No. (ADR)
 : 1170

 UN-No. (IMDG)
 : 1170

 UN-No. (IATA)
 : 1170

 UN-No. (ADN)
 : 1170

 UN-No. (RID)
 : 1170

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Proper Shipping Name (IMDG) : ETHANOL (ETHYL ALCOHOL)

Proper Shipping Name (IATA) : Ethanol

Proper Shipping Name (ADN) : ETHANOL (ETHYL ALCOHOL)
Proper Shipping Name (RID) : ETHANOL (ETHYL ALCOHOL)

Transport document description (ADR) : UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II, (D/E)

Safety Data Sheet

Transport document description (IMDG) : UN 1170 ETHANOL (ETHYL ALCOHOL), 3, II

Transport document description (IATA) : UN 1170 Ethanol, 3, II

Transport document description (ADN) : UN 1170 ETHANOL (ETHYL ALCOHOL), 3, II Transport document description (RID) : UN 1170 ETHANOL (ETHYL ALCOHOL), 3, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3



IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3



ADN

Transport hazard class(es) (ADN) : 3
Danger labels (ADN) : 3



RID

Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3



14.4. Packing group

Packing group (ADR) : II

Safety Data Sheet

Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1
Special provisions (ADR) : 144, 601
Limited quantities (ADR) : 1I
Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container : T4

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 2

Special provisions for carriage - Operation : S2, S20

(ADR)

Hazard identification number (Kemler No.) : 33

Orange plates

33 1170

: TP1

Tunnel restriction code (ADR) : D/E EAC code : •2YE

- Transport by sea

Special provisions (IMDG) : 144 : 1 L Limited quantities (IMDG) Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T4 Tank special provisions (IMDG) : TP1 EmS-No. (Fire) : F-E : S-D EmS-No. (Spillage) Stowage category (IMDG) : A

Properties and observations (IMDG) : Colourless, volatile liquids.Pure ETHANOL: flashpoint 13°C c.c. Explosive limits:

3.3% to 19% Miscible with water.

- Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity : 1L
(IATA)

PCA packing instructions (IATA) : 353

Safety Data Sheet

PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L

Special provisions (IATA) : A3, A58, A180

ERG code (IATA) : 3L

- Inland waterway transport

Classification code (ADN) : F1
Special provisions (ADN) : 144, 601
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01

Number of blue cones/lights (ADN) : 1

- Rail transport

Classification code (RID) : F1
Special provisions (RID) : 144, 601
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2

Packing instructions (RID) : P001, IBC02, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container : T4

instructions (RID)

Portable tank and bulk container special

provisions (RID)

Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE7
Hazard identification number (RID) : 33

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

: TP1

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 2, significant hazard to water (Classification according to

AwSV, Annex 1)

Safety Data Sheet

Immission Control Act - 12 BlmSchV

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : Ethanol is listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen - Borstvoeding

: Ethanol is listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen -

Vruchtbaarheid

: Ethanol is listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen - Ontwikkeling

: Ethanol is listed

Denmark

: Class I-1 Class for fire hazard Store unit : 1 liter

Classification remarks : F <Flam. Liq. 2>; Emergency management guidelines for the storage of flammable

liquids must be followed

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product