# **KOVAC'S INDOLE REAGENT MSDS**

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-01491

# 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

#### 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, H226

Category 3

Acute toxicity (oral), H302

Category 4

Skin corrosion/irritation, H315

Category 2

Serious eye damage/eye H318

irritation, Category 1

Specific target organ H336

toxicity — Single exposure, Category 3,

Narcosis

Specific target organ H335

toxicity — Single exposure, Category 3, Respiratory tract irritation

Full text of H statements : see section 16

# Safety Data Sheet

### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP)



GHS02

GHS05

GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H226 - Flammable liquid and vapour.

H302 - Harmful if swallowed. H315 - Causes skin irritation. H318 - Causes serious eye damage. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP) : P261 - Avoid breathing dust, vapours, fume, gas, spray.

P280 - Wear protective gloves, protective clothing, eye protection, face protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

#### 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<br>to Regulation (EC) No.<br>1272/2008 [CLP]  |
|-----------------------------------|--|---------|--|
| 1-Butanol                         | (CAS-No.) 71-36-3<br>(EC-No.) 200-751-6<br>(EC Index-No.) 603-004-00-6   | 75 - 99 | Eye Dam. 1, H318<br>Flam. Liq. 3, H226<br>Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>STOT SE 3, H335<br>STOT SE 3, H336 |
| Hydrochloric acid                 | (CAS-No.) 7647-01-0<br>(EC-No.) 231-595-7<br>(EC Index-No.) 017-002-01-X | 5 - 10  | Skin Corr. 1B, H314<br>STOT SE 3, H335   |
| p-DIMETHYL AMINO BENZALDEHYDE 98% | (CAS-No.) 100-10-7   | 1 - 5   | Not classified   |

### Safety Data Sheet

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 : Remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTER/doctor if you feel unwell. Give oxygen or artificial respiration if necessary.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower.

Immediately call a POISON CENTER/doctor.

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

and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. Do NOT induce

vomiting.

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

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Causes skin irritation.

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

Symptoms/effects after ingestion : Harmful if swallowed.

#### 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 : Water spray. Foam. Dry powder. Carbon dioxide.

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

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : 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. Use special care to avoid static electric charges. No open

flames. No smoking.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Avoid breathing dust/fume/gas/mist/vapours/spray. Use personal protective

equipment as required.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment.

# Safety Data Sheet

### 6.3. Methods and material for containment and cleaning up

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

with inert solids, such as clay or diatomaceous earth as soon as possible.

#### 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 : Avoid contact with skin and eyes. Do not breathe vapours. Use only outdoors or in a

well-ventilated area.

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.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep container tightly closed. Store in a well-ventilated place. Keep cool.

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 face shield
Skin and body protection : Wear suitable protective clothing

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection

equipment is recommended

# **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Light yellow to brown.

Odour : No data available

Odour threshold : No data available

pH : 1

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

Melting point : No data available

### Safety Data Sheet

Freezing point : No data available

Boiling point : 85 °C

Flash point : 36 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : 2.31

Relative density : No data available

Density : 0.92 g/cm<sup>3</sup>

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 : No data available

### 9.2. Other information

No additional information available

**SECTION 10: Stability and reactivity** 

#### 10.1. Reactivity

Thermal decomposition generates: Corrosive vapours.

#### 10.2. Chemical stability

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

## 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Open flame. Heat. Sparks. Overheating.

#### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Thermal decomposition generates: Corrosive vapours. May release flammable gases.

# **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

| ATE CLP (oral) | 500 mg/kg bodyweight |
|----------------|----------------------|
|----------------|----------------------|

# Safety Data Sheet

Skin corrosion/irritation : Causes skin irritation.

pH: 1

Serious eye damage/irritation : Causes serious eye damage.

pΗ: 1

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

Reproductive toxicity : Not classified

STOT-single exposure : May cause drowsiness or dizziness. May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects

and symptoms

: Harmful if swallowed.

**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

Product/Packaging disposal recommendations

: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

# Safety Data Sheet

### **SECTION 14: Transport information**

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

14.1. UN number

UN-No. (ADR) : 2920 UN-No. (IMDG) : 2920 UN-No. (IATA) : 2920 UN-No. (ADN) : 2920 UN-No. (RID) : 2920

14.2. UN proper shipping name

Proper Shipping Name (ADR) : CORROSIVE LIQUID, FLAMMABLE, N.O.S. Proper Shipping Name (IMDG) : CORROSIVE LIQUID, FLAMMABLE, N.O.S.

Proper Shipping Name (IATA) : Corrosive liquid, flammable, n.o.s.

Proper Shipping Name (ADN) : CORROSIVE LIQUID, FLAMMABLE, N.O.S. Proper Shipping Name (RID) : CORROSIVE LIQUID, FLAMMABLE, N.O.S.

Transport document description (ADR) : UN 2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S., 8 (3), II, (D/E) Transport document description (IMDG) : UN 2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S., 8 (3), II

Transport document description (IATA) : UN 2920 Corrosive liquid, flammable, n.o.s., 8 (3), II

Transport document description (ADN) : UN 2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S., 8 (3), II Transport document description (RID) : UN 2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S., 8 (3), II

# 14.3. Transport hazard class(es)

**ADR** 

Transport hazard class(es) (ADR) : 8 (3)
Danger labels (ADR) : 8, 3



#### **IMDG**

Transport hazard class(es) (IMDG) : 8 (3)
Danger labels (IMDG) : 8, 3



#### IATA

Transport hazard class(es) (IATA) : 8 (3) Hazard labels (IATA) : 8, 3



#### ADN

Transport hazard class(es) (ADN) : 8 (3)

# Safety Data Sheet

Danger labels (ADN) : 8, 3



RID

Transport hazard class(es) (RID) : 8 (3)
Danger labels (RID) : 8, 3



14.4. Packing group

Packing group (ADR) : II
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) : CF1
Special provisions (ADR) : 274
Limited quantities (ADR) : 11
Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02

Mixed packing provisions (ADR) : MP15
Portable tank and bulk container : T11

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

: TP2, TP27

Tank code (ADR) : L4BN

Vehicle for tank carriage : FL

Transport category (ADR) : 2

Special provisions for carriage - Operation : S2

(ADR)

Hazard identification number (Kemler No.) : 83

Orange plates

83 2920

Tunnel restriction code (ADR) : D/E
EAC code : •3W
APP code : A(fl)

# Safety Data Sheet

- Transport by sea

Special provisions (IMDG) : 274

Packing instructions (IMDG) : P001

IBC packing instructions (IMDG) : IBC02

Tank instructions (IMDG) : T11

Tank appaid provisions (IMDC) : TP2 TB

Tank special provisions (IMDG) : TP2, TP27

EmS-No. (Fire): F-EEmS-No. (Spillage): S-CStowage category (IMDG): C

Stowage and handling (IMDG) : SW1, SW2

Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

MFAG-No : 132

- Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y840
PCA limited quantity max net quantity : 0.5L

(IATA)

PCA packing instructions (IATA) : 851
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 855
CAO max net quantity (IATA) : 30L
ERG code (IATA) : 8F

- Inland waterway transport

Classification code (ADN) : CF1
Special provisions (ADN) : 274
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T

Equipment required (ADN) : PP, EP, EX, A

Ventilation (ADN) : VE01 Number of blue cones/lights (ADN) : 1

- Rail transport

Classification code (RID) : CF1
Special provisions (RID) : 274
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2

Packing instructions (RID) : P001, IBC02
Mixed packing provisions (RID) : MP15

Portable tank and bulk container : T11

instructions (RID)

Portable tank and bulk container special

provisions (RID)

: TP2, TP27

Tank codes for RID tanks (RID) : L4BN

Transport category (RID) : 2

Colis express (express parcels) (RID) : CE6

Hazard identification number (RID) : 83

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

Not applicable

### Safety Data Sheet

#### **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) 3, severe hazard to water (Classification according to

AwSV, Annex 1)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV

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

**Netherlands** 

SZW-lijst van kankerverwekkende stoffen : None of the components are listed SZW-lijst van mutagene stoffen : None of the components are listed NIET-limitatieve lijst van voor de : None of the components are listed

voortplanting giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen -

Vruchtbaarheid

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen - Ontwikkeling

: None of the components are listed

: None of the components are listed

Denmark

Class for fire hazard : Class II-1 Store unit : 5 liter

Classification remarks : R10 <H226;H302;H315;H318;H335;H336>; Emergency management guidelines for

the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

### 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

# Safety Data Sheet

| Eye Dam. 1    | Serious eye damage/eye irritation, Category 1  |
|---------------|--|
| Flam. Liq. 3  | Flammable liquids, Category 3  |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1B   |
| Skin Irrit, 2 | Skin corrosion/irritation, Category 2  |
| STOT SE 3     | Specific target organ toxicity — Single exposure, Category 3, Narcosis                     |
| STOT SE 3     | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H226          | Flammable liquid and vapour.   |
| H302          | Harmful if swallowed.  |
| H314          | Causes severe skin burns and eye damage.   |
| H315          | Causes skin irritation.  |
| H318          | Causes serious eye damage.   |
| H335          | May cause respiratory irritation.  |
| H336          | May cause drowsiness or dizziness.   |

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