

Material Safety Data Sheet	
DEVARDA'S ALLOY	VERSION : 02 DATE OF ISSUE : 26-08-2019 SUPERSEDES : 01
Product Code : 14100	Page 1 of 10

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : DEVARDA'S ALLOY

Product code : 14100

Identification of the product : Devarda's Alloy

CAS No : 8049- 11- 4

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

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification : MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.

Email : info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503.

1.4. Emergency telephone number

Emergency number : +91 22 4066 8111 (10:00am - 6:00 pm)

2. Hazards identification

2.1. Classification of the substance or mixture

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

Flammable solids, Category 1 H228

Full text of classification categories and H statements : see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Extra classification(s) to display

Hazard pictograms



Signal word : Danger

Hazard statements : H228 - Flammable solid

Precautionary statements : P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

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2.3. Other hazards

No additional information available

3. Composition/information on ingredients

3.1. Substance: Devarda's Alloy

CAS No : 8049- 11- 4

Full text of R- and H-phrases: see section 16

3.2. Mixture

Not applicable

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.

First-aid measures after skin contact : Wash with plenty of soap and water. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Get 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.

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

No additional information available

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

Treat symptomatically.

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 : Flammable solid.

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.

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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 naked lights. No smoking.

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 : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.

6.4. Reference to other sections

No additional information available

7. Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

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

Do not breathe vapours. Take precautionary measures against static discharge. 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.

7.2. Conditions for safe storage, including any incompatibilities

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

Ground/bond container and receiving equipment. 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

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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 : Wear respiratory protection

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Odour threshold : No data available

pH : No data available

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

Melting point : 550 °C

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : Flammable solid

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Solubility : Water: Negligible (< 0.1%)

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

10. Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

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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

May release flammable gases.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

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

13. Disposal considerations

13.1. Waste treatment methods

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Additional information : Handle empty containers with care because residual vapours are flammable.

14. Transport information

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

14.1. UN number

UN-No. (ADR) : 3089

UN-No. (IMDG) : 3089

UN-No.(IATA) : 3089

UN-No.(ADN) : 3089

UN-No. (RID) : 3089

14.2. UN proper shipping name

Proper Shipping Name (ADR) : METAL POWDER, FLAMMABLE, N.O.S.

Proper Shipping Name (IMDG) : METAL POWDER, FLAMMABLE, N.O.S.

Proper Shipping Name (IATA) : METAL POWDER, FLAMMABLE, N.O.S.

Proper Shipping Name (ADN) : METAL POWDER, FLAMMABLE, N.O.S.

Proper Shipping Name (RID) : METAL POWDER, FLAMMABLE, N.O.S.

Transport document description (ADR) : UN 3089 METAL POWDER, FLAMMABLE, N.O.S., 4.1, II, (E)

Transport document description (IMDG) : UN 3089 METAL POWDER, FLAMMABLE, N.O.S., 4.1, II

Transport document description (IATA) : UN 3089 METAL POWDER, FLAMMABLE, N.O.S., 4.1, II

Transport document description (ADN) : UN 3089 METAL POWDER, FLAMMABLE, N.O.S., 4.1, II

Transport document description (RID) : UN 3089 METAL POWDER, FLAMMABLE, N.O.S., 4.1, II

14.3. Transport hazard class(es)

ADR : Transport hazard class(es) (ADR) : 4.1

Danger labels (ADR) : 4.1

IMDG : Transport hazard class(es) (IMDG) : 4.1

Danger labels (IMDG) : 4.1

IATA : Transport hazard class(es) (IATA) : 4.1

Hazard labels (IATA) : 4.1

AND : Transport hazard class(es) (ADN) : 4.1

Danger labels (ADN) : 4.1

RID : Transport hazard class(es) (RID) : 4.1

Danger labels (RID) : 4.1

14.4. Packing group

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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) : F3

Special provision (ADR) : 552

Limited quantities (ADR) : 1kg

Excepted quantities (ADR) : E2

Packing instructions (ADR) : P002, IBC08

Special packing provisions (ADR) : B4

Mixed packing provisions (ADR) : MP11

Portable tank and bulk container

instructions (ADR) : T3

Portable tank and bulk container special

provisions (ADR) : TP33

Tank code (ADR) : SGAN

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Special provisions for carriage – Packages (ADR) : V11

Hazard identification number (Kemler No.) : 40

Orange plates : Tunnel restriction code (ADR) : E

EAC code : 4Y

- Transport by sea

Limited quantities (IMDG) : 1 kg

Excepted quantities (IMDG) : E2

Packing instructions (IMDG) : P002

IBC packing instructions (IMDG) : IBC08

IBC special provisions (IMDG) : B2, B4

Tank instructions (IMDG) : T3

Tank special provisions (IMDG) : TP33

EmS-No. (Fire) : F-G

EmS-No. (Spillage) : S-G

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Stowage category (IMDG) : B
Stowage and handling (IMDG) : H1
Segregation (IMDG) : SG17, SG25, SG26
MFAG-No : 170
- Air transport
PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y441
PCA limited quantity max net quantity (IATA) : 5kg
PCA packing instructions (IATA) : 445
PCA max net quantity (IATA) : 15kg
CAO packing instructions (IATA) : 448
CAO max net quantity (IATA) : 50kg
Special provision (IATA) : A3
ERG code (IATA) : 3L
- Inland waterway transport
Classification code (ADN) : F3
Special provisions (ADN) : 552
Limited quantities (ADN) : 1 kg
Excepted quantities (ADN) : E2
Equipment required (ADN) : PP
Number of blue cones/lights (ADN) : 1
- Rail transport
Classification code (RID) : F3
Special provision (RID) : 552
Limited quantities (RID) : 1kg
Excepted quantities (RID) : E2
Packing instructions (RID) : P002, IBC08
Special packing provisions (RID) : B4
Mixed packing provisions (RID) : MP11
Portable tank and bulk container instructions (RID) : T3
Portable tank and bulk container special provisions (RID) : TP33
Tank codes for RID tanks (RID) : SGAN
Transport category (RID) : 2
Special provisions for carriage – Packages (RID) : W1
Colis express (express parcels) (RID) : CE10

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Hazard identification number (RID) : 40

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

15. Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

DEVARDA'S ALLOY is not on the REACH Candidate List

DEVARDA'S ALLOY is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

15.2. Chemical safety assessment

No additional information available

16. Other information

Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Further information : None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008 **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness.

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