



SAFETY DATA SHEET: Liquid Gravity BD38 240 g

Date: 28.08.2022 Revision 6

Revision 7 dated 04.07.2024

Pages 1/10

In accordance to REACH etc. (Amendment) Regulation 2021

1 Identification of the substance/mixture and of the company

1.1 Product Identifier

Identifier: Liquid Gravity

Designation: Metal alloy

1.2 Relevant identification uses of the mixture and uses advised against

1.2.1 Relevant identified uses

Main Use category: Model Making accessory

Identified use: Weighting

1.2.2 Uses advised against

No further information available

1.3 Detail of the supplier of the Safety Data Sheet

Supplier: Deluxe Materials Ltd.,
Unit 12/13 Cufau de Business Park,
Cufau de Lane, Bramley
Hampshire
RG26 5DL
UK

Email: john@deluxematerials.com

Telephone: +44(0)1256 883 944 Mon-Fri office
hours only

1.4 Emergency Information

Country	Organisation	Address	Contact Details
UK	National Poisons Information Service (NPIS)	National Poisons Information Service (NPIS)	Director.birmingham.unit@npis.org Website: www.npis.org

2 Hazards identification

2.1 Classification of the substance or the mixture

Classification according to regulation (EC) no. 1272/2008 (CLP) as amended by GB-CLP regulation, Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations

Not classified

2.2 Label elements

In accordance with point 1.3.4 of CLP regulation, metals in massive form and alloys, although classified as hazardous do not require a label, if they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in which they are placed on the market, in accordance with the criteria of this Annex.

2.3 Other Hazards

Other Hazards not resulting in classification:

Risks are dependent upon the users' process and application.

Health Risks:

Health risks are linked to the exposure to dust. Dust is produced by the fragmentation of the particles and is not normally of concern if product is used in intended modelling application. Dust may cause mechanical irritation of the eyes and respiratory tract.

Fire – Explosion:

Dust can form an explosive mixture with air.

Other Risks:

Noise.

Risk of falling due to presence of abrasive on the floor.

3 Composition/information on ingredients

3.1 Substance

Not applicable

3.2 Mixture

Designation	Identifier	%	Classification according to regulation (EC) No 1272/2008(CLP)
Iron	(NoCAS) 7439-89-6 (NoCE) 231-096-4	>95	Not classified
Silicon	(NoCAS) 7440-21-3 (NoCE) 231-130-8	0.4-1.2	Not classified
Carbon	(NoCAS) 7440-44-0 (NoCE) 231-153-3	0.8-1.2	Not classified
Manganese	(NoCAS) 7439-96-5 (NoCE) 231-105-1	0.35-1.2	Not classified

Additional Information:

The product is manufactured from recovered scrap metal. Due to scrap metal recovery process, other unintentionally added elements such as Chromium (Cr), Nickel (Ni) or Copper (Cu), may be present as impurities. The concentrations of these elements could in some case individually exceed 0.1% but do not lead to a global classification of the alloy.

4 First aid measures

4.1 Description of first aid measures

General information:

In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Following inhalation:

Remove person to fresh air and keep comfortable for breathing.

Following skin contact:

If on skin, wash thoroughly with water after handling. If irritation occurs get medical advice/attention.

Following eye contact:

Do not rub, wash thoroughly with water keeping eyelids wide open (at least 15 minutes). If irritation persists, consult an ophthalmologist.

Following ingestion:

Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms /effects:

Dust may cause mechanical irritation of the eyes and respiratory tract.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Select media appropriate for the surrounding materials/area.

In the event of Class A fires (packaging): ABC powder, water, foam

In the event of Class D fires (metal fire): powders, CO₂

Unsuitable extinguishing agents: No further relevant information available

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition product in case of fire: Metal oxides smoke, fumes or vapour.

Carbon oxides (CO, CO₂).

5.3 Advice for fire-fighters

Fire-fighting instructions: Dike and contain extinguishing fluids. Do not inhale the smoke.

Fire-fighting protection: Do not intervene without suitable protective equipment. Wear self contained breathing apparatus and full body protection.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedure.

General measures: Provide adequate ventilation. Steel abrasives on horizontal surfaces can create slip and fall hazards. It is recommended to keep floors, stairs and work areas clean at all times.

6.1.1 For non-emergency personnel

Emergency procedure: Mark the application area and prohibit access to unauthorised persons. Avoid contact with skin, eyes or clothing. Do not breathe dust. Response limited to qualified personnel with appropriate protection.

6.1.2 For emergency responders

Protective equipment: Use personal protective equipment, see section 8.

Emergency procedure: Prevent and limit the formation and dispersion of dust.

6.2 Environmental precautions

Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Cleaning up: Upon accidental release: quickly clean the area with a vacuum cleaner or magnetic brush to reduce the risk of falling. Prevent or limit the formation and dispersion of dust.

Other information: The material may be reused, recycled or disposed of in compliance with local regulations.

6.4 Reference to other sections

For more information, see section 13.

7 Handling and storage 7.1

Precautions for safe handling

Precautions for safe handling:

Handle with care to avoid damage to packaging to avoid spillage. Use in a well-ventilated area. Do not breathe dust. Avoid contact with eye, skin, and clothing.

General occupational hygiene:

Do not drink, eat or smoke at the workplace. Wash hands after handling. Separate work clothes from street clothes. Clean them separately.

7.2 Conditions for safe storage, including any incompatibilities

Conditions of storage:

Deluxe Materials Limited know of no incompatible substance.

Store in a dry place. No safety risk but oxidation and aggregation may occur in the presence of moisture.

7.3 Specific end use (s)

No further relevant information available.

8 Exposure controls and personal protection

8.1.1 Control parameters

Dust		
UK	Local Name	General workplace dust
UK	IOELV TWA (mg/m ³)	10mg/m ³ (inhalable fraction) 4mg/m ³ (respirable fraction)
Chromium (7440-47-3)		
EU	Local Name	Chromium metal
EU	IOELV TWA (mg/m ³)	2 mg/m ³
EU	Note	SCOEL recommendation (2002)
UK	Local Name	Chromium & CR(II);Cr(III) compounds
UK	IOELV TWA (mg/m ³)	0.5 mg/m ³
Nickel (7440-02-0)		
EU	Local Name	Nickel compounds
EU	BOELV TWA (mg/m ³)	0.1 mg/m ³ (inhalable fraction, up to January 2025) 0.05 mg/m ³ (inhalable fraction, from 18.01.2025) 0.01 mg/m ³ (respirable fraction)
EU	Regulation Reference	Directive 2004/37/CE; Directive 2022/431
UK	Local name	Nickel and water-insoluble nickel compound

UK	IOELV TWA (mg/m ³)	0.5 mg/m ³
Manganese (7439-96-5)		
EU	Local Name	Manganese
EU	IOELV TWA (mg/m ³)	0.2 mg/m ³ (inhalable fraction) 0.05 mg/m ³ (respirable fraction)
EU	Regulation Reference	Commission Directive (EU) 2017/164
UK	Local Name	Manganese and inorganic compound
UK	IOELV TWA (mg/m ³)	0.2 mg/m ³ (inhalable fraction) 0.05 mg/m ³ (respirable fraction)
Silicon (7440-21-3)		
UK	Local Name	Silicon
UK	IOELV TWA (mg/m ³)	10mg/m ³ (inhalable fraction) 4 mg/m ³ (respirable fraction)
Copper (7440-50-8)		
EU	Local Name	Copper
EU	IOELV TWA (mg/m ³)	0.01 mg/m ³ (respirable fraction)
EU	Regulation Reference	SCOEL Recommendations (2011)
UK	Local Name	Copper
UK	IOELV TWA (mg/m ³)	1 mg/m ³ (respirable fraction)

8.1.2 Biological limit values

Chromium (7440-47-3)		
UK	Local Name	Chromium and its water-soluble compounds
UK	BMGV	10µmol Cr/mol creatine(0.46µg/g),in urine, post shift
UK	Notes	HSE
Nickel (7440-02-0)		
EU	Local Name	Nickel and nickel compound
EU	BGV	3 µg/L urine
EU	Notes	SCOEL Recommendations (2011)

8.2 Exposure controls

Appropriate controls:

Ensure adequate ventilation. If product sanded or abraded. Emergency eye rinse should be installed in the vicinity of any area where there is a risk of exposure.

Hand protection:

Protective gloves against mechanical risks according to EN 388

Eye and face protection:

Tightly sealed goggles according to EN 166

Skin protection:

Wear suitable protective clothing according to EN ISO 14877

Respiratory protection:

Filter P2 according to EN 149

Environmental exposure controls:

Take all necessary measures to avoid the accidental release of the product outside, in case of rupture of containers or transfer systems.

9 Physical and Chemical Properties**9.1 Information on basis physical and chemical properties**

Physical State	Solid; Massive metal alloy
Colour	Varied shades/hues grey
Odour	Odourless
Melting range	1400-1550 °C (2552-2822°F)
Freezing point	No data available
Boiling range	2850-3150 °C (5162-5702°F)
Flammability (solid, gas)	Non-flammable
Lower and upper explosion limit	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
pH	Not applicable
Kinematic viscosity	Not applicable
Solubility (s)	Water – insoluble
Partition coefficient n-octanol/water	Not applicable
Vapour pressure	No data available
Density	>7.6 g/cm ³
Bulk density	3-5 g/cm ³
Relative vapour density	Not applicable
Particle characteristics	Diameter range 0.05mm to 8mm depending on grade

9.2 Other information**9.2.1 Information with regard to physical hazard classes**

Explosion test: EN 14034-1:2005 and EN 14034-2:2006 Product tested: high carbon steel blasting media as described in this document Particles Size: 100% below 355µm; 96% below 63 µm	Results Explosion class St=0

9.2.2 Other safety characteristics

Formation of explosive dust/air mixture:

Risks are dependent upon the user's process and application.

Explosion test: EN 14034-1:2005 and EN 14034-2:2006 Product tested: dust recovered after crushing of the high carbon steel blasting media Particles Size: 100% below 315µm; 90% below 63 µm	Results Kst = 13 m.bar/s Pmax of 2.3bar Explosion class St 1

10 Stability and reactivity

10.1 Reactivity

The product is stable under normal conditions of storage and handling.

10.2 Chemical stability Stable under normal conditions.

10.3 Possibility of hazards

No hazardous reactions known.

10.4 Conditions to avoid

Water.
Humidity.

10.5 Incompatible materials

Acids

10.6 Hazardous decomposition products

No hazardous decomposition products under normal storage and uses conditions. Toxic metal oxide smoke can be releases in case of fire.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	Not classified (Based on available data, the classification criteria are not met) pH: Not applicable.
Eye damage/irritation	Not classified (Based on available data, the classification criteria are not met)
Skin sensibilisation or to the respiratory tract	Not classified (Based on available data, the classification criteria are not met)
Additional indications	Based on available data. The release rate of nickel is low <0.5 µg/cm ² /week, the sensibilisation induced by stainless steel can be considered as unlikely.
Germ cell mutagenicity/Genotoxicity	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	Not classified (Based on available data.Etude sur la toxicite de l'acier inoxydable –FINNISH INSTITUTE OF OCCUPATIONAL HEATH 2010.(method OCDE 451) Determination by expert opinion and probative force)
Reproductive toxicity	Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	Not classified (Based on available data.Etude sur la toxicite de l'acier inoxydable –FINNISH INSTITUTE OF OCCUPATIONAL HEATH 2010.(method OCDE 412))
Aspiration hazard	Not classified (Technical impossibility to obtain data)

11.2 Information on other hazards

No relevant information available

12 Ecological Information

12.1 Toxicity

Ecology – General: Does not present a particular risk to the environment, subject to compliance with Section 13 disposal recommendations and national or local regulatory requirements that may apply.

Acute aquatic toxicity: Not classified

Chronic aquatic toxicity: Not classified

12.2 Persistence and degradability

Not applicable. Does not contain any PBT or vPvB substances

12.3 Bio accumulative potential

Not applicable. Does not contain any PBT or vPvB substances

12.4 Mobility in soil

No further relevant information available

12.5 Results of PVP and vPvP assessment

No further relevant information available. Does not contain any PBT or vPvB substances

12.6 Endocrine disrupting properties

No further relevant information available

Does not contain any substance with endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

12.7 Other adverse effect

No further relevant information available

13 Disposal information

13.1 Waste treatment methods

Waste code: the List of Waste (LoW) provides an EU-wide common terminology for waste classification to ease waste management, including for hazardous waste. Waste Blasting Materials belong to the 12 01 code group according to LoW which comprises “waste from shaping and physical and mechanical surface treatment of metals and plastics”, under mirror entries 12 01 16* dedicated to hazardous waste blasting materials and 12 01 17 to nonhazardous one.

The waste holder has the duty to assess the hazard properties of the waste.

Recommendation: Material recycling. Do not discharge the product into the environment.

Dust and used abrasive may contain pollutants resulting from the industrial process. Each user must study the problem of waste in relation to his specific activity, in contact with specialised organisations.

14 Transport information

According to ADR/RID/IMDG/IATA/ADN requirements.

ADR	IMDG	IATA	AND	RID
<u>14.1 UN number</u>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<u>14.2 UN proper shipping name</u>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<u>14.3 Transport hazard class</u>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<u>14.4 Packaging group</u>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<u>14.5 Environmental hazard</u>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to annex II of MARPOL73/78 and the IBC code Not applicable

15 Regulatory information

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

15.1.1 EU regulations

REACH regulation (EC) N° 1907/2006 modified by regulation (EU) 2015/830, amended by regulation (EU) 2020/878

Does not contain any substance listed in the ANNEX XVII of REACH

Does not contain any substance of the candidate list (REACH)

Does not contain any substance listed in the ANNEX XIV of REACH

Does not contain any substance listed in the ANNEX I of regulation “POP” (EU) 2019/1021 amended by regulation (EU) 2021/277

15.1.2 National legislations

UK Statutory Instruments

REACH etc. (Amendment) Regulations: UK legislation SI 2019/758 amended by 202/1577 and SI 2021/904

Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.)(EU Exit) Regulations: UK legislation SI 2019/720 amended by 2020/1567.

The Persistent Organic Pollutants (Amendment) (EU Exit) Regulations: UK legislation SI 2020/1358

15.2 Chemical safety assessment

No chemical safety assessment done for the products.

16 Other Information Data:

Guidance on the compilation of SDS. ECHA- European Chemicals Agency.

Etude sur la toxicite de l’acier inoxydable – FINNISH INSTITUTE OF OCCUPATIONAL HEALTH 2010.Decision de l’association europeenne EuroFer stainless sur la classification de l’acier inoxydable – 2014.

GESTIS –DUST-EX

Database Combustion and explosion characteristics of dust.

RoHS:

The product for the identification use does not fall within the scope of RoHS directive. For information, the chemical composition of the product complies with Annex II of the directive 2011/65/EU modified by directive 2015/863/EU.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.



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