

Safety data sheet according to 830/2015/EC

Printing date: 22.01.2016

Revision: 22.01.2016

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

- **1.1 Product identifier**
- **Trade name:** Linoxyn Remover / Blanching Removal Solvent
- **Product code:** PC-211 / PC-1010
- **CAS number:**
68-12-2
- **EC number:**
200-679-5
- **Index number:**
616-001-00-X
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture:** Cleaner solvent
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Gainsborough Products, LLC
6680 Alhambra Ave. #249
Martinez, CA 94553-6105
USA
(925) 957-9277
service@gainsboroughproducts.com
- **1.4 Emergency telephone number:**
ChemTel Inc.
+1 (800)255-3924, +1 (813)248-0585

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Flam. Liq. 3 H226 Flammable liquid and vapour.
Acute Tox. 4 H312 Harmful in contact with skin.
Acute Tox. 4 H332 Harmful if inhaled.
Eye Irrit. 2 H319 Causes serious eye irritation.
Repr. 1B H360D May damage the unborn child.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02 GHS07 GHS08

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- **Signal word** Danger
- **Hazard-determining components of labelling:**
N,N-dimethylformamide
- **Hazard statements**
H226 Flammable liquid and vapour.
H312+H332 Harmful in contact with skin or if inhaled.
H319 Causes serious eye irritation.
H360D May damage the unborn child.
- **Precautionary statements**
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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 foam, powder, or carbon dioxide for extinction.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P403+P235 Store in a well-ventilated place. Keep cool.
- **Additional information:**
Restricted to professional users.
- **2.3 Other hazards** There are no other hazards not otherwise classified that have been identified.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
68-12-2 N,N-dimethylformamide
- **Identification number(s)**
- **EC number:** 200-679-5
- **Index number:** 616-001-00-X

· SVHC

68-12-2	N,N-dimethylformamide
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SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

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- **After skin contact:**
Immediately rinse with water.
If skin irritation is experienced, consult a doctor.
- **After eye contact:**
Remove contact lenses if worn, if possible.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
Breathing difficulty
Coughing
Dizziness
Slight irritant effect on skin and mucous membranes.
Irritant to eyes.
Nausea in case of ingestion.
Gastric or intestinal disorders when ingested.
Vomiting.
Diarrhea.
- **Hazards:**
Danger of impaired breathing.
Danger through skin adsorption.
Harmful if inhaled.
May be harmful in contact with skin.
May damage fertility or the unborn child.
- **4.3 Indication of any immediate medical attention and special treatment needed**
Medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** None.
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.
- **Additional information:**
Eliminate all ignition sources if safe to do so.
Cool endangered receptacles with water fog or haze.

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SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources.

Protect from heat

· **6.2 Environmental precautions**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **6.3 Methods and material for containment and cleaning up**

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).

Send for recovery or disposal in suitable receptacles.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Use only in well ventilated areas.

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

· **Information about fire - and explosion protection:**

Flammable liquid and vapour.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

Do not spray onto a naked flame or any incandescent material.

Emergency cooling must be available in case of nearby fire.

Flammable gas-air mixtures may form in empty receptacles.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Avoid storage near extreme heat, ignition sources or open flame.

Provide ventilation for receptacles.

· **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from oxidising agents.

· **Further information about storage conditions:** Keep container tightly sealed.

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· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

68-12-2 N,N-dimethylformamide

IOELV	Short-term value: 30 mg/m ³ , 10 ppm Long-term value: 15 mg/m ³ , 5 ppm Skin
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- **DNELs:** No further relevant information available.
- **PNECs:** No further relevant information available.

· 8.2 Exposure controls

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

- **Respiratory protection:** Suitable respiratory protective device recommended.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

Laminated film gloves.

Neoprene gloves

Butyl rubber, BR

Natural rubber, NR

· **Not suitable are gloves made of the following materials:**

Nitrile rubber, NBR

PVC gloves

PVA gloves

· **Eye protection:**



Safety glasses

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment:** Avoid release to the environment.

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· **Risk management measures:** See Section 7 for additional information.

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SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **Appearance**

· Form:	Liquid
· Colour:	Colourless
· Odour:	Amine-like
· Odour threshold:	Not determined.

· pH-value at 20 °C:	6,7
· Melting point/Melting range:	-61 °C
· Boiling point/Boiling range:	153 °C

· **Flash point:** 58 °C (TCC)

· **Flammability (solid, gaseous):** Not applicable.

· **Auto/Self-ignition temperature:** 445 °C

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Not determined.

· **Danger of explosion:** Not determined.

· **Explosion limits**

· Lower:	2,2 Vol %
· Upper:	15,2 Vol %

· **Oxidising properties** Not determined.

· **Vapour pressure at 20 °C:** 3,6 hPa

· Density at 20 °C:	0,95 g/cm ³
· Relative density:	Not determined.
· Vapour density at 20 °C:	2,5 g/cm ³ (Air = 1)
· Evaporation rate at 20 °C:	0,17 (n-BuAc = 1)

· **Solubility in / Miscibility with water:** Fully miscible.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity**

· Dynamic:	Not determined.
· Kinematic:	Not determined.

· **9.2 Other information** No further relevant information available.

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SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Reacts with strong oxidising agents.
Reacts with strong acids.
Reacts with strong alkali.
Reacts with reducing agents.
Used empty containers may contain product gases which form explosive mixtures with air.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.
- **10.4 Conditions to avoid** Excessive heat.
- **10.5 Incompatible materials** Oxidizers, strong bases, strong acids
- **10.6 Hazardous decomposition products**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Ammonia

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
Harmful in contact with skin or if inhaled.
- **LD/LC50 values relevant for classification:** None.
- **Primary irritant effect**
- **Skin corrosion/irritation:** Slight irritant effect on skin and mucous membranes.
- **Serious eye damage/irritation:**
Causes serious eye irritation.
- **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.

IARC (International Agency for Research on Cancer):

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- **Probable routes of exposure:**
Ingestion.
Inhalation.
Eye contact.
Skin contact.
- **Acute effects (acute toxicity, irritation and corrosivity):**
Irritating to eyes.
Harmful if inhaled.
Harmful in contact with skin.
- **Repeated dose toxicity:** Danger of very serious irreversible effects.
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

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- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:**
May damage the unborn child.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Do not allow product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
- **DOT** NA1993
Reclassified as combustible under US DOT regulations. Labeling is only required for single packages ≥ 119 US gal / 450 L to include Combustible symbol and Proper Shipping Name.
- **ADR, IMDG, IATA** UN2265

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· **14.2 UN proper shipping name**



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 5 L (1,3 gal).

· DOT	Combustible liquid, n.o.s. (N,N-Dimethylformamide)
· ADR	2265 N,N-DIMETHYL-FORMAMIDE
· IMDG	N,N-DIMETHYLFORMAMIDE
· IATA	N,N-Dimethylformamide

· **14.3 Transport hazard class(es)**

· DOT



· Class	3 Combustible liquids
· Label	3

· ADR



· Class	3 (F1) Flammable liquids.
· Label	3

· IMDG, IATA



· Class	3 Flammable liquids.
· Label	3

· **14.4 Packing group**

· DOT, ADR, IMDG, IATA	III
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· **14.5 Environmental hazards:**

· Marine pollutant:	No
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· **14.6 Special precautions for user**

· Warning:	Flammable liquids.
· Danger code (Kemler):	30
· EMS Number:	3-06

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

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· **Transport/Additional information:**

· DOT	Reportable Quantity (RQ): 100lbs (45,4kg)
· ADR	
· Limited quantities (LQ)	5L
· Transport category	3
· Tunnel restriction code	D/E

SECTION 15: Regulatory information

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

· **Carcinogenic Categories**

· **IARC (International Agency for Research on Cancer)**

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· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

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· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

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.

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 SVHC: Substances of Very High Concern
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 3: Flammable liquids, Hazard Category 3
 Acute Tox. 4: Acute toxicity, Hazard Category 4
 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
 Repr. 1B: Reproductive toxicity, Hazard Category 1B

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)
 Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/)

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Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN:
978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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