

Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200)



Printing date: 01/28/2016

Revision: 01/28/2016

1 Identification

- **Product identifier**
- **Trade name:** Super-D
- **Article number:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Degreasing agent
- **Restrictions on use:** See Sections 8 and 10 for further information.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
DYNACCO, INC.
17461 147th ST SE (Physical)
PO Box 27 (Mailing)
Monroe WA 98272 USA
Tel: 360-794-8974
- **Emergency telephone number:**
ChemTel Inc.
+1 (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Repr. 1B H360 May damage fertility or the unborn child.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**

GHS05 GHS08
- **Signal word:** Danger
- **Hazard-determining components of labeling:**
Potassium hydroxide
2-methoxypropanol
- **Hazard statements:**
H314 Causes severe skin burns and eye damage.
H360 May damage fertility or the unborn child.
- **Precautionary statements:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe mist/vapors/spray.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection.

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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.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P363 Wash contaminated clothing before reuse.

P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

P308+P313 IF exposed or concerned: Get medical advice/attention.










P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

| | | |
|------------|---|-----|
| 1310-58-3 | Potassium hydroxide  Met. Corr. 1, H290; Skin Corr. 1A, H314  Acute Tox. 4, H302 | <5% |
| 107-98-2 | 1-methoxy-2-propanol  Flam. Liq. 3, H226  STOT SE 3, H336 | <5% |
| 68478-95-5 | Poly(oxy-1,2-ethanediyl), alpha,alpha'-(iminodi-2,1-ethanediyl)bis(omega-hydroxy-, N-(3-(branched decyloxy)propyl) derivs.  Acute Tox. 4, H302 | <5% |
| 1589-47-5 | 2-methoxypropanol  Flam. Liq. 3, H226  Repr. 1B, H360  Eye Dam. 1, H318  Skin Irrit. 2, H315; STOT SE 3, H335 | <1% |

· **Additional information:**

For the listed ingredient(s), the identity and exact percentage(s) are being withheld as a trade secret.
 For the wording of the listed Hazard Statements refer to section 16.

4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Immediately remove any clothing soiled by the product.

Immediately rinse with water.

Seek immediate medical help for blistering or open wounds.

· **After eye contact:**

Remove contact lenses if worn, if possible.

Rinse opened eye for several minutes under running water. Then consult a doctor.

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- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:**
Strong caustic effect on skin and mucous membranes.
Strong irritant with the danger of severe eye injury.
Nausea in case of ingestion.
Gastric or intestinal disorders when ingested.
Vomiting.
Diarrhea.
- **Danger:**
Repeated exposure may cause skin dryness or cracking.
Danger of gastric perforation.
May damage fertility or the unborn child.
May be harmful if swallowed.
- **Indication of any immediate medical attention and special treatment needed:**
Medical supervision for at least 48 hours.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Particular danger of slipping on leaked/spilled product.
- **Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable receptacles.
- **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
 - Prevent formation of aerosols.
 - Use only in well ventilated areas.
 - Avoid splashes or spray in enclosed areas.
- **Information about protection against explosions and fires:**
 - Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
 - Store only in the original receptacle.
 - Unsuitable material for receptacle: aluminium.
 - Unsuitable material for receptacle: steel.
 - Unsuitable material for receptacle: glass or ceramic.
- **Information about storage in one common storage facility:**
 - Store away from foodstuffs.
 - Do not store together with oxidizing and acidic materials.
- **Further information about storage conditions:** Keep containers tightly sealed.
- **Specific end use(s):** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

107-98-2 1-methoxy-2-propanol

| | |
|---------------|---|
| REL (USA) | Short-term value: 540 mg/m ³ , 150 ppm Long-term value: 360 mg/m ³ , 100 ppm |
| TLV (USA) | Short-term value: 369 mg/m ³ , 100 ppm Long-term value: 184 mg/m ³ , 50 ppm |
| EL (Canada) | Short-term value: 75 ppm Long-term value: 50 ppm |
| EV (Canada) | Short-term value: 550 mg/m ³ , 150 ppm Long-term value: 365 mg/m ³ , 100 ppm |
| LMPE (Mexico) | Short-term value: 150 ppm Long-term value: 100 ppm |

1310-58-3 Potassium hydroxide

| | |
|-------------|--|
| REL (USA) | Ceiling limit value: 2 mg/m ³ |
| TLV (USA) | Ceiling limit value: 2 mg/m ³ |
| EL (Canada) | Ceiling limit value: 2 mg/m ³ |

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| | |
|---------------|--|
| EV (Canada) | Ceiling limit value: 2 mg/m ³ |
| LMPE (Mexico) | Ceiling limit value: 2 mg/m ³ |

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Pregnant women should strictly avoid inhalation or ingestion.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Engineering controls:** No relevant information available.
- **Breathing equipment:**
Not required under normal conditions of use.
Use suitable respiratory protective device in case of insufficient ventilation.
Use suitable respiratory protective device when aerosol or mist is formed.
For spills, respiratory protection may be advisable.
- **Protection of hands:**



Protective gloves

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

- **Eye protection:**
Contact lenses should not be worn.



Safety glasses

- **Body protection:** Alkaline resistant protective clothing
- **Limitation and supervision of exposure into the environment**
Avoid release to the environment.
- **Risk management measures** See Section 7 for additional information.

9 Physical and chemical properties

· Information on basic physical and chemical properties

- **Appearance:**
 - **Form:** Liquid
 - **Color:** Greenish-Yellow.
 - **Odor:** Characteristic
 - **Odor threshold:** Not determined.
- | | |
|---------------------------------------|-----------------|
| · pH-value: | Not determined. |
| · Melting point/Melting range: | Not determined. |
| · Boiling point/Boiling range: | 100 °C (212 °F) |

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| | |
|---|---|
| · Flash point: | Not applicable. |
| · Flammability (solid, gaseous): | Not applicable. |
| · Auto-ignition temperature: | Not determined. |
| · Decomposition temperature: | Not determined. |
| · Auto igniting: | Product is not self-igniting. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Explosion limits Lower: Upper: | Not determined. Not determined. |
| · Vapor pressure: | Not determined. |
| · Density: | Not determined. |
| · Relative density: | Not determined. |
| · Vapor density: | Not determined. |
| · Evaporation rate: | Not determined. |
| · Solubility in / Miscibility with Water: | Fully miscible. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity Dynamic: Kinematic: | Not determined. Not determined. |
| · Other information | No relevant information available. |

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions:**
Reacts with strong oxidizing agents.
Strong exothermic reaction with acids.
Corrosive action on metals.
Reacts with fats and oils.
Attacks materials containing glass and silicate.
- **Conditions to avoid:** Avoid acids.
- **Incompatible materials:**
Strong acids
Strong oxidizers such as perchlorates, bromates, and nitrates.
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide

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Nitrogen oxides (NOx)
Phosphorus oxides (e.g. P2O5)

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

68478-95-5 Poly(oxy-1,2-ethanediyl), alpha,alpha'-(iminodi-2,1-ethanediyl)bis(omega-hydroxy-, N-(3-(branched decyloxy)propyl) derivs.

| | | |
|------|------|-----------------------|
| Oral | LD50 | 1000-2000 mg/kg (rat) |
|------|------|-----------------------|

1310-58-3 Potassium hydroxide

| | | |
|------|------|-----------------|
| Oral | LD50 | 273 mg/kg (rat) |
|------|------|-----------------|

- **Primary irritant effect:**

- **On the skin:** Caustic effect on skin and mucous membranes.
- **On the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** No relevant information available.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

- **NTP (National Toxicology Program):**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

- **Probable route(s) of exposure:**

Inhalation.
Eye contact.
Skin contact.
Ingestion.

- **Acute effects (acute toxicity, irritation and corrosivity):** May be harmful if swallowed.
- **Repeated dose toxicity:** No relevant information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Repr. 1B
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** May damage fertility or 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.

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12 Ecological information

- **Toxicity**
- **Aquatic toxicity** Toxic for aquatic organisms
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system, even in small quantities. Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
- **Other adverse effects:** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
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.
- **Waste disposal key:** EPA RCRA Code (USA): D002.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN1814
- **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, IATA** Potassium hydroxide, solution, mixture
- **ADR** 1814 POTASSIUM HYDROXIDE SOLUTION, MIXTURE
- **IMDG** POTASSIUM HYDROXIDE SOLUTION, MIXTURE

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- **Transport hazard class(es)**

- **DOT**



- **Class** 8 Corrosive substances
- **Label** 8

- **ADR**



- **Class** 8 (C5) Corrosive substances
- **Label** 8

- **IMDG, IATA**



- **Class** 8 Corrosive substances
- **Label** 8

- **Packing group**

- **DOT, ADR, IMDG, IATA** II

- **Environmental hazards**

- **Marine pollutant:** No

- **Special precautions for user**

Warning: Corrosive substances

- **Danger code (Kemler):** 80

- **EMS Number:** F-A, S-B

- **Segregation groups** Alkalis

- **Transport in bulk according to Annex II of**

- **MARPOL73/78 and the IBC Code** Not applicable.

15 Regulatory information

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

- **United States (USA)**

- **SARA**

- **Section 302 (extremely hazardous substances):**

- None of the ingredients are listed.

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| |
|--|
| · Section 304 (emergency release notification): |
| None of the ingredients are listed. |

| |
|---|
| · Sections 311/312 (hazardous chemical threshold planning quantity in pounds): |
| None of the ingredients are listed. |

| |
|--|
| · Section 355 (extremely hazardous substances): |
| None of the ingredients are listed. |

| |
|--|
| · Section 313 (Specific toxic chemical listings): |
| None of the ingredients are listed. |

| |
|--|
| · TSCA (Toxic Substances Control Act) |
| All ingredients are listed. |

| |
|---|
| · Proposition 65 (California) |
| · Chemicals known to cause cancer: |
| None of the ingredients are listed. |

| |
|--|
| · Chemicals known to cause reproductive toxicity for females: |
| None of the ingredients are listed. |

| |
|--|
| · Chemicals known to cause reproductive toxicity for males: |
| None of the ingredients are listed. |

| |
|---|
| · Chemicals known to cause developmental toxicity: |
| None of the ingredients are listed. |

| |
|---|
| · Carcinogenic categories |
| · EPA (Environmental Protection Agency): |
| None of the ingredients are listed. |

| |
|--|
| · IARC (International Agency for Research on Cancer): |
| None of the ingredients are listed. |

| |
|--|
| · NIOSH-Ca (National Institute for Occupational Safety and Health): |
| None of the ingredients are listed. |

| |
|---|
| · Canadian substance listings |
| · Canadian Domestic Substances List (DSL): |
| All ingredients are listed. |

| |
|--|
| · Canadian Ingredient Disclosure list (limit 0.1%): |
| None of the ingredients are listed. |

| |
|--|
| · Canadian Ingredient Disclosure list (limit 1%): |
| 107-98-2 1-methoxy-2-propanol |
| 1310-58-3 Potassium hydroxide |

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.

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· **Date of preparation / last revision** 01/28/2016 / -

· **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
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Met. Corr. 1: Corrosive to metals, Hazard Category 1
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Repr. 1B: Reproductive toxicity, Hazard Category 1B
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. 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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