

**Material Safety Data Sheet**  
acc. to OSHA and ANSI

Printing date 11/10/2008

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Reviewed on 02/23/2007

**1 Identification of substance:**

**Product details:**

**Product name:** 1-Decanol

**Stock number:**  
A17288  
L03296

**Manufacturer/Supplier:**  
Alfa Aesar, A Johnson Matthey Company  
Johnson Matthey Catalog Company, Inc.  
30 Bond Street  
Ward Hill, MA 01835-8099

**Emergency Phone:** (978) 521-6300  
**CHEMTREC:** (800) 424-9300  
**Web Site:** www.alfa.com

**Information Department:** Health, Safety and Environmental Department

**Emergency information:**  
During normal hours the Health, Safety and Environmental Department.  
After normal hours call Chemtrec at (800) 424-9300.

**2 Composition/Data on components:**

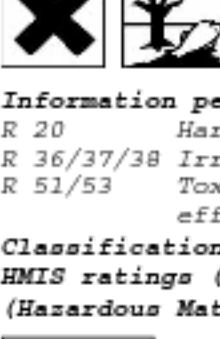
**Chemical characterization:**

**Description: (CAS#)**  
1-Decanol (CAS# 112-30-1), 100%

**Identification number(s):**  
**EINECS Number:** 203-956-9

**3 Hazards identification**

**Hazard description:**

 Xn Harmful  
N Dangerous for the environment

**Information pertaining to particular dangers for man and environment**

R 20 Harmful by inhalation.  
R 36/37/38 Irritating to eyes, respiratory system and skin.  
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Classification system**  
**HMS ratings (scale 0-4)**  
**(Hazardous Materials Identification System)**

HEALTH	1	Health (acute effects) - 1
FIRE	2	Flammability - 2
REACTIVITY	1	Reactivity - 1

**4 First aid measures**

**After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

**After skin contact**

Immediately wash with water and soap and rinse thoroughly.

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Seek immediate medical advice.

**After eye contact**

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

**After swallowing** Seek immediate medical advice.

**5 Fire fighting measures**

**Suitable extinguishing agents**

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards caused by the material, its products of combustion or resulting gases:**

In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide

**Protective equipment:**

Wear self-contained respirator.  
Wear fully protective impervious suit.

**6 Accidental release measures**

**Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation

**Measures for environmental protection:**

Do not allow material to be released to the environment without proper governmental permits.

**Measures for cleaning/collecting:** Ensure adequate ventilation.

**Additional information:**

See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and storage**

**Handling**

**Information for safe handling:**

Keep container tightly sealed.  
Store in cool, dry place in tightly closed containers.  
Ensure good ventilation at the workplace.

**Information about protection against explosions and fires:**

Keep ignition sources away.  
Protect from heat.  
Protect against electrostatic charges.

**Storage**

**Requirements to be met by storerooms and receptacles:**  
No special requirements.

**Information about storage in one common storage facility:**  
Do not store together with oxidizing and acidic materials.

Store away from halogens.

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

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**Product name:** 1-Decanol

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Store in cool, dry conditions in well sealed containers.

**8 Exposure controls and personal protection**

**Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

**Components with limit values that require monitoring at the workplace:**  
Not required.

**Additional information:** No data

**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.  
Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.

**Breathing equipment:**

Use suitable respirator when high concentrations are present.

**Protection of hands:** Impervious gloves

**Eye protection:** Safety glasses

**Body protection:** Protective work clothing.

**9 Physical and chemical properties:**

**General Information**

**Form:** Viscous  
**Color:** Liquid  
**Odor:** Colorless  
Sweet

**Change in condition**

**Melting point/Melting range:** 7°C (45°F)  
**Boiling point/Boiling range:** 229°C (444°F)  
**Sublimation temperature / start:** Not determined

**Flash point:** 82°C (180°F)

**Ignition temperature:** Not determined

**Decomposition temperature:** Not determined

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**

**Lower:** Not determined  
**Upper:** Not determined

**Vapor pressure at 212°C (414°F):** 11 hPa (8 mm Hg)

**Density at 20°C (68°F):** 0.8287 g/cm<sup>3</sup>

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**Product name:** 1-Decanol

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**Solubility in / Miscibility with**

**Water:** Not miscible or difficult to mix

**10 Stability and reactivity**

**Thermal decomposition / conditions to be avoided:**

Decomposition will not occur if used and stored according to specifications.

**Materials to be avoided:**

**Acids**

Oxidizing agents  
Halogens

Acid chlorides  
Acid anhydrides

**Dangerous reactions:** No dangerous reactions known

**Dangerous products of decomposition:** Carbon monoxide and carbon dioxide

**11 Toxicological information**

**Acute toxicity:**

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

Oral	LD50	6500 mg/kg (mouse)
		4720 mg/kg (rat)
Dermal	LD50	3560 mg/kg (rabbit)
		4000 mg/m3/2H (mouse)
Inhalative	LC50/2H	2600 mg/24H (rabbit)
		75 mg (human)
Irritation of skin	moderate	83 mg (rabbit)
	severe	
Irritation of eyes	severe	

**Primary irritant effect:**  
on the skin: Irritant to skin and mucous membranes.  
on the eye: Irritating effect.

**Sensitization:** No sensitizing effects known.

**Other information (about experimental toxicology):**

Mutagenic effects have been observed on tests with laboratory animals.

**Subacute to chronic toxicity:**

**Subacute to chronic toxicity:**  
Inhalation of high concentrations can have a narcotic effect. Symptoms include headache, dizziness and other CNS effects.

**Additional toxicological information:**  
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for components in this product.

**12 Ecological information:**

**Ecotoxicological effects:**

**Remark:** Toxic for fish

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**Product name:** 1-Decanol

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**General notes:**

Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Do not allow material to be released to the environment without proper governmental permits.

**Toxic for aquatic organisms**

**13 Disposal considerations**

**Product:**

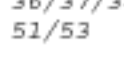
**Recommendation:** Consult state, local or national regulations to ensure proper disposal.

**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

**DOT regulations:**

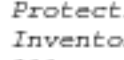


**Hazard class:** 9  
**Identification number:** UN3082  
**Packing group:** III  
**Proper shipping name (technical name):** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-Decanol)

**Label**

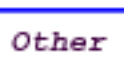
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**Land transport ADR/RID (cross-border)**



**ADR/RID class:** 9 (M6) Miscellaneous dangerous substances and articles  
**Danger code (Kemler):** 90  
**UN-Number:** 3082  
**Packing group:** III  
**Description of goods:** 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-Decanol)

**Maritime transport IMDG:**



**IMDG Class:** 9  
**UN Number:** 3082

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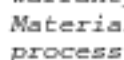
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**Product name:** 1-Decanol

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**Label** 9  
**Packing group:** III  
**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-Decanol)

**Air transport ICAO-TI and IATA-DGR:**



**ICAO/IATA Class:** 9  
**UN/ID Number:** 3082  
**Label** 9  
**Packing group:** III  
**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-Decanol)

**15 Regulations**

**Product related hazard informations:**

**Hazard symbols:**

Xn Harmful  
N Dangerous for the environment

**Risk phrases:**

20 Harmful by inhalation.  
36/37/38 Irritating to eyes, respiratory system and skin.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Safety phrases:**

9 Keep container in a well-ventilated place.  
23 Do not breathe gas/fumes/vapour/spray.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
36/37 Wear suitable protective clothing and gloves.  
57 Use appropriate container to avoid environmental contamination.

**National regulations**

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

**Information about limitation of use:**

For use only by technically qualified individuals.

**16 Other information:**

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Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing MSDS:** Health, Safety and Environmental Department.  
**Contact:** Paul V. Connolly

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