Date: 01:28 PM PDT, 09/14/2005
From: [redacted]
To: [redacted]
Cc: [redacted]
Subject: Diesel Fuel Odor #604419

2005 [illegible] -2 [illegible] 11:52 Copy to DMV

[redacted]

10142120

We have started smelling diesel fuel in the new coach. Investigation has revealed that the fuel lines to and from the AquaHot system are the Gates LOL Plus hose. As you recall from the previous problems with #603954, this is the same hose. It appears, that the isolated incident with this hose only being incorrectly used in #603954 was not the case.

I have attached pictures of the hose attached to the AquaHot system and also the specification from Gates that states that this hose is NOT recommended for use in a fuel application.

This odor from the diesel fuel in effecting my breathing and general health. As you also may recall, the vapors from diesel fuel are listed as cancer causing agents by both the EPA and CDC. We are also very concerned that the high concentrations of vapors in the bays are flammable and explosive. For more information, go to http://www.atsdr.cdc.gov/tfacts3.html

Please advise ASAP as to [redacted] plan to resolve this problem.

Regards,
[redacted]

IMG_9539.JPG (2066K)
IMG_9538.JPG (1965K)
Hose spec.jpg (498K)

Marcia 11/2/05

Date: 02:19 PM PDT, 09/14/2005
From: "HOSE PRODUCT APPLICATION ASSISTANCE" <[redacted]
To: <[redacted]>
Subject: RE: Correct hose for Diesel Fuel Applications

[redacted], do not use LOL+ for diesel. Use RLA for diesel. See attached

[redacted]
Hose Product Application
[redacted]

---Original Message---
From: [redacted]
Sent: Monday, September 12, 2005 1:40 PM
To: HOSE PRODUCT APPLICATION ASSISTANCE
Subject: Correct hose for Diesel Fuel Applications

Hello
We have a 1/4 inch hose that is used for diesel fuel lines and it appears to be leaching out of the hose, I think that the hose is actualy not recommended for diesel fuel, the Gates part marking is LOL plus 4LOLA(plus sign).

Can you e-mail the spec for this hose and a spec on a recommended 1/4 hose for diesel fuel

Regards,
[redacted]

~[redacted]

Sender Contact Information:

[redacted] Pahrump, NV [redacted] usa
Phone: [redacted]
Fax: [redacted]
Email: [redacted]

This email was sent to you ([redacted]) from [redacted].
Message ID: 31414

RLA.PDF (1461K)
lol_PDF (747K)

CONTENTS

RELATED RESOURCES

A-Z INDEX

ATSDR RESOURCES

September 2005

ToxFAQs™ for Benzene
(Benceno)

CAS# 71-43-2

This fact sheet answers the most frequently asked health questions about benzene. For more information, you may call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Benzene is a widely used chemical formed from both natural processes and human activities. Breathing benzene can cause drowsiness, dizziness, and unconsciousness; long-term benzene exposure causes effects on the bone marrow and can cause anemia and leukemia. Benzene has been found in at least 1,001 of the 1,662 National Priority List sites identified by the Environmental Protection Agency (EPA).

What is benzene?

Benzene is a colorless liquid with a sweet odor. It evaporates into the air very quickly and dissolves slightly in water. It is highly flammable and is formed from both natural processes and human activities.

Benzene is widely used in the United States; it ranks in the top 20 chemicals for production volume. Some industries use benzene to make other chemicals which are used to make plastics, resins, and nylon and synthetic fibers. Benzene is also used to make some types of rubbers, lubricants, dyes, detergents, drugs, and pesticides. Natural sources of benzene include volcanoes and forest fires. Benzene is also a natural part of crude oil, gasoline, and cigarette smoke.

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What happens to benzene when it enters the environment?

- Industrial processes are the main source of benzene in the environment.
- Benzene can pass into the air from water and soil.
- It reacts with other chemicals in the air and breaks down

Toxicological Profiles
Minimum Risk Levels
MMGs
MHMIs
Interaction Profiles
Priority List of Hazardous Substances
Division of Toxicology

within a few days.

- Benzene in the air can attach to rain or snow and be carried back down to the ground.
- It breaks down more slowly in water and soil, and can pass through the soil into underground water.
- Benzene does not build up in plants or animals.

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How might I be exposed to benzene

- Outdoor air contains low levels of benzene from tobacco smoke, automobile service stations, exhaust from motor vehicles, and industrial emissions.
- Vapors (or gases) from products that contain benzene, such as glues, paints, furniture wax, and detergents, can also be a source of exposure.
- Air around hazardous waste sites or gas stations will contain higher levels of benzene.
- Working in industries that make or use benzene.

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How can benzene affect my health?

Breathing very high levels of benzene can result in death, while high levels can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness. Eating or drinking foods containing high levels of benzene can cause vomiting, irritation of the stomach, dizziness, sleepiness, convulsions, rapid heart rate, and death.

The major effect of benzene from long-term exposure is on the blood. Benzene causes harmful effects on the bone marrow and can cause a decrease in red blood cells leading to anemia. It can also cause excessive bleeding and can affect the immune system, increasing the chance for infection.

Some women who breathed high levels of benzene for many months had irregular menstrual periods and a decrease in the size of their ovaries. It is not known whether benzene will affect fertility in men.

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How likely is benzene to cause cancer?

Long-term exposure to high levels of benzene in the air can cause leukemia, particularly acute myelogenous leukemia, often referred to as AML. This is a cancer of the blood-forming organs. The Department of Health and Human Services (DHHS) has determined that benzene is a known carcinogen. The International Agency for Research on Cancer (IARC) and the EPA have determined that benzene is carcinogenic to humans.

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How can benzene affect children?

Children can be affected by benzene exposure in the same ways as adults. It is not known if children are more susceptible to benzene poisoning than adults.

Benzene can pass from the mother's blood to a fetus. Animal studies have shown low birth weights, delayed bone formation, and bone marrow damage when pregnant animals breathed benzene.

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How can families reduce the risks of exposure to benzene?

Benzene exposure can be reduced by limiting contact with gasoline and cigarette smoke. Families are encouraged not to smoke in their house, in enclosed environments, or near their children.

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Is there a medical test to show whether I've been exposed to benzene?

Several tests can show if you have been exposed to benzene. There is a test for measuring benzene in the breath; this test must be done shortly after exposure. Benzene can also be measured in the blood; however, since benzene disappears rapidly from the blood, this test is only useful for recent exposures.

In the body, benzene is converted to products called metabolites. Certain metabolites can be measured in the urine. The metabolite S-phenylmercapturic acid in urine is a sensitive indicator of benzene exposure. However, this test must be done shortly after exposure and is not a reliable indicator of how much benzene you have been exposed to, since the metabolites may be present in urine from other sources.

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Has the federal government made recommendations to protect human health?

The EPA has set the maximum permissible level of benzene in drinking water at 5 parts benzene per billion parts of water (5 ppb).

The Occupational Safety and Health Administration (OSHA) has set limits of 1 part benzene per million parts of workplace air (1 ppm) for 8 hour shifts and 40 hour work weeks.

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References

Agency for Toxic Substances and Disease Registry (ATSDR). 1997. Managing Hazardous Materials Incidents. Volume III – Medical Management Guidelines for Acute Chemical Exposures: Benzene. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Agency for Toxic Substances and Disease Registry (ATSDR). 2005. Toxicological Profile for benzene. (*Draft for Public Comment*). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

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Where can I get more information?

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

For more information, contact:

Agency for Toxic Substances and Disease Registry
Division of Toxicology
1600 Clifton Road NE, Mailstop F-32
Atlanta, GA 30333
Phone: 1-888-42-ATSDR (1-888-422-8737)
FAX: (770)-488-4178
Email: ATSDRIC@cdc.gov

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Recommended Use: Petroleum-base hydraulic oils, water, antifreeze solutions, engine lubricating oils, and air. Low pressure and couplings are **NOT** recommended for pressure surge applications or critical applications, such as permanent piping in residential or commercial buildings. Do not use for gasoline or diesel fuels, unless approved by Gates H/C Product Application.

Tube: Black, oil-resistant synthetic rubber highly resistant to oil and heat (Nitrile – Type C)*.

Reinforcement: One fiber braid.

Cover: Oil- and abrasion-resistant synthetic rubber (Modified Nitrile – Type C)*. Available in black–Neoprene (LOLA), blue (LOLB), green (LOLG), red (LOLR), yellow (LOLY) and gray (LOLC) colors.

Temperature Range: -40°F to +212°F (-40°C to +100°C). For air: 160°F (+71°C) only. For water emulsions, etc., see page C8.

Couplings: Field Attachable LOC, pages G3-8. Clamp over beaded nipple.

LOL Lock-On Hose is packaged in UPS shippable reels.

Description	Part No. (50' Length)	Part No. (Bulk Reel)	Product No. (Bulk Reel)	Hose I.D. (in.)	Hose O.D (in.)	Working Pressure (psi)	Min. Burst Pressure (psi)	Min. Bend Radius (in.)	Vacuum (in. Hg)	Approx. Bulk Reel Length (Ft.)
3LOLA②	—	70650	3284-2500	3/16	0.41	300	1,200	3.0	28	300
3LOLB②	—	70651	3284-2510	3/16	0.41	300	1,200	3.0	28	300
3LOLG②③	—	70652	3284-2530	3/16	0.41	300	1,200	3.0	28	300
3LOLR②	—	70653	3284-2540	3/16	0.41	300	1,200	3.0	28	300
3LOLY②③	—	70654	3284-2550	3/16	0.41	300	1,200	3.0	28	300
3LOLC②④	—	70655	3284-2520	3/16	0.41	300	1,200	3.0	28	300
4LOLA	85961	70657	3284-2501	1/4	0.47	300	1,200	3.0	28	300
4LOLB	85967②	70658	3284-2511	1/4	0.47	300	1,200	3.0	28	300
4LOLG	85972②	70659	3284-2531	1/4	0.47	300	1,200	3.0	28	300
4LOLR	85976②	70660	3284-2541	1/4	0.47	300	1,200	3.0	28	300
4LOLY	—	70661	3284-2561	1/4	0.47	300	1,200	3.0	28	300
4LOLC	—	70662	3284-2521	1/4	0.47	300	1,200	3.0	28	300
5LOLA	85962	70664	3284-2502	5/16	0.55	300	1,200	3.0	28	300
6LOLA	85963	70665	3284-2503	3/8	0.63	300	1,200	3.0	28	300
6LOLB	85968②	70666	3284-2513	3/8	0.63	300	1,200	3.0	28	300
6LOLG	85973②	70667	3284-2533	3/8	0.63	300	1,200	3.0	28	300
6LOLR	85977②	70668	3284-2543	3/8	0.63	300	1,200	3.0	28	300
6LOLY	—	70669	3284-2563	3/8	0.63	300	1,200	3.0	28	300
6LOLC	—	70670	3284-2523	3/8	0.63	300	1,200	3.0	28	300
8LOLA	85964	70672	3284-2504	1/2	0.77	300	1,200	5.0	28	300
8LOLB	85969②	70673	3284-2515	1/2	0.77	300	1,200	5.0	28	300
8LOLG	85974②	70674	3284-2535	1/2	0.77	300	1,200	5.0	28	300
8LOLR	85978②	70675	3284-2545	1/2	0.77	300	1,200	5.0	28	300
8LOLY	—	70676	3284-2565	1/2	0.77	300	1,200	5.0	28	300
8LOLC	—	70677	3284-2526	1/2	0.77	300	1,200	5.0	28	300
10LOLA	85965	70679	3284-2505	5/8	0.94	300	1,200	6.0	28	250
10LOLB	85970②	70680	3284-2517	5/8	0.94	300	1,200	6.0	28	250
10LOLG②	—	70681	3284-2537	5/8	0.94	300	1,200	6.0	28	250
10LOLR②	—	70682	3284-2547	5/8	0.94	300	1,200	6.0	28	250
10LOLY②	—	70683	3284-2567	5/8	0.94	300	1,200	6.0	28	250
10LOLC	—	70684	3284-2527	5/8	0.94	300	1,200	6.0	28	250
12LOLA	85966	70686	3284-2506	3/4	1.06	300	1,200	7.0	15	250
12LOLB	85971②	70687	3284-2519	3/4	1.06	300	1,200	7.0	15	225
12LOLG	85975②	70688	3284-2536	3/4	1.06	300	1,200	7.0	15	225
12LOLR	85979②	70689	3284-2549	3/4	1.06	300	1,200	7.0	15	225
12LOLY	—	70690	3284-2569	3/4	1.06	300	1,200	7.0	15	225
12LOLC	—	70691	3284-2529	3/4	1.06	300	1,200	7.0	15	225

②25 ft. length.
③Couplings for this size are available on special order only.
④Special hose, subject to minimum order requirements if not in inventory.

* Hose stock specifications on page C7.