

Through the Eyes of CHEMTREC: How Emergency Operations Centers Utilize Safety Data Sheets

SCHC Conference 2024

CHEMTREC[®]



Objectives

- **Understand the display of emergency phone numbers on SDSs and within their applicable jurisdictions. Correctly identifying languages spoken, hours of operations, advice limitations.**
- **Analyze the importance of clear and comprehensive SDSs in facilitating effective communication and decision-making within EOCs during crisis situations.**
- **Appreciate the role of a detailed and accessible SDS in empowering emergency personnel to effectively handle and contain incidents, thereby minimizing risks to communities and facilitating post-incident investigations.**

Section 1.4 Emergency Statement

Does your Section 1.4 have the following:

- An emergency phone number listed? (minimum requirement for U.S.)**
 - Hours of operation?**
 - Limitations of services? (English only. Medical advice only)**

**For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident Call
CHEMTREC Day or Night: 1-800-XXX-XXXX (Toll Free, USA) / XXX-XXX-XXXX (Virginia, USA) CCN XXXXX**

***CCN (CHEMTREC customer number) is a unique identifier associated directly to a company within CHEMTRECS SDS library**



Types of Calls

All incidents

**spills, leaks,
fires, exposures,
accidents**

**All modes
of transportation
and fixed facility**

**ALL 9
DOT
hazard
classes**

**Preventative
calls during or
prior to
shipments**



Who calls needing emergency information?

- ◆ Plant Sites, terminals and Warehouses
- ◆ First Responders
- ◆ Carriers
- ◆ Consumers
- ◆ Medical Personnel
- ◆ Regulators
- ◆ Shippers
- ◆ Citizens



Incident Data 2023 Overview



32,184 Leaks/Spills



2,443 Human Exposures



334 Accidents involving highway transportation vehicles with no release (this includes cargo tanks or trailers, this does not include tank cars)



649 Damages (containers (i.e. drum or tote) were damaged)



374 Derailments with no leak (tank cars - rail only)

CHEMTREC Historical Involvement

- March 1989: Exxon Valdez oil spill in Prince William Sound, AK
- July 1991: Southern Pacific Railroad derailment near Dunsmuir, CA, along Sacramento River, leaking herbicide.
- April 1995: Oklahoma City bombing
- September 2001: 9-11 attacks in New York and Pentagon
- October 2001: Anthrax incidents
- February 2003: Space Shuttle Columbia disintegrated upon re-entry into Earth's atmosphere.
- January 2005: Norfolk Southern train derailment in Graniteville, SC, releasing Chlorine gas.
- September 2005: Hurricane Katarina, Gulf Coast
- July 2016: Lac-Megantic train derailment resulting in fire and explosion of Crude Oil tank cars.

February 1, 2003 Texas/ Louisiana



February 1, 2003 Texas/ Louisiana

- **Over the skies of Southeast Texas and Louisiana mid-morning the Space Shuttle Columbia disintegrated upon re-entry into atmosphere.**
- **Initial call was made from a local responder in Texas advising of the incident.**
- **Question to CHEMTREC from On Scene Commander:**
 - **What can be expected from a possible fallout/decontamination from Hydrazine which was onboard the Shuttle which is used to power it in space.**
 - **Manufacturer/Supplier not known.**

February 1, 2003 Texas/ Louisiana

- **Reviewed a generic SDS on Hydrazine and discussed properties; decomposition; environmental issues.**
- **Contacted NASA Dangerous Goods Officer (a listed registrant of CHEMTREC).**
- **Placed NASA officials in direct contact with On Scene officials in Texas.**
- **Hydrazine manufacturer still not readily identified.**
- **CHEMTREC contacted significant manufacturer of Hydrazine and placed them in contact with both On Scene officials and NASA.**

Typical emergency caller

Type of Caller	Example of Questions Asked by	Ideal information off SDS
Warehouse employee	“There is a brown liquid leaking from a 350-gallon tote bin. Is this material hazardous?”	Correct/accurate hazards identified in Section 2
First Responder	“What is the IDLH for this product?”	Exposure limits listed in Section 8
Carrier/Shipper	“How do we contain and clean up this product on floor of trailer?”	Confirming size of spill (small vs. large), advising on PPE and methods for containment/clean up in Section 6
Consumer	“My 2-year-old daughter got this material on her hands. What should I do?”	Checking symptoms/effects related to skin contact in Section 4 (11), follow first aid measures after skin contact.
Medical Personnel	“What are the specific ingredients, percentage including innocuous ingredients?”	Section 3 component disclosures
Citizen	“I was following a truck, and a pail fell out of it and broke open and leaked over the hood. What should I do?”	The entire SDS- Section 2 hazards Section 3&8 (what hazardous ingredients are involved) Section 5: Risk of fire with engine/heat? Section 12: Environmental hazard? Leaking into nearby stream risk?

Take Aways

- **The SDS can be the most important piece of information for an Emergency Responder handling an emergency involving a chemical product due to the specific details it provides.**
- **Most common request from an Emergency Responder to CHEMTREC – “Can you send us as copy of the product’s SDS?”**
- **The SDS will be shared and reviewed by all on the incident site for clarification and consistency among all involved parties.**
- **The SDS is a direct representation of your organization and the readers’ first interaction with your organization before in having direct communications.**
- **The better written SDS the more comfort and confidence the Responder will have responding to incident**

Contact Information



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