



MSDS

By SFC Robert E. Price and SFC Alcides Santana

MSDS—neither a disease nor a meat tenderizer—is another one of those pesky acronyms that every service member or DoD civilian needs to know about. MSDS is the acronym for Material Safety Data Sheet. You'll find this handy little sheet of paper on everything from common spray paint to the most dangerous chemicals.

They weren't put on for decorations, either. In fact they're required by the Occupational Safety and Health Administration (OSHA), as well as various Army Regulations (ARs). Regulations aside, these pieces of paper can literally save your life and the lives of your soldiers.

There are an estimated 575,000 existing chemical products. They pose a serious problem for the vast majority of our soldiers since many will come into contact with quite a variety of these potentially hazardous materials. These chemicals can cause or contribute to heart ailments, kidney and lung damage, sterility, cancer, burns and rashes. It's our responsibility to make sure all our soldiers are protected from these hazards. In fact, we would be derelict in our duties if we as NCOs failed to properly protect our soldiers from these chemicals.

MSDS sheets are like having the Poison Prevention Hot Line at your fingertips. These sheets tell you virtually everything about the particular chemicals that you work with. Facts such as: flash point, if the use of a respirator is required; first aid information, if contact with skin or eyes is dangerous; and unlimited information on the makeup, storage and use of the product is listed right on the MSDS. MSDS information sheets are relatively new and in the few years they've been around they've saved lives, prevented injuries and saved countless dollars. NCOs should make it a top priority to learn about these lifesaving sheets of paper.

When you receive items from the supply system that have MSDS sheets attached there's an obligation to user and supervisor to read and thoroughly understand all that is involved with the use of the product. The sheet will be posted on or near the product where all can see and heed the information. It's not, repeat *not* to be thrown in the trash along with the other packing materials. Remember, this sheet of paper can save a life or prevent serious injury to you and your soldiers.

Industry and the military have spent millions of dollars and time to test and develop ways to protect personnel from death and injury caused by the improper handling of hazardous materials. As responsible NCOs, we can take the extra time and effort to become familiar with and properly post these little sheets of paper known as MSDS.

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Force

By Jim Collins

A lot of NCOs play with less than a full deck when planning operations. And if you're one of the NCOs who's not playing with the wild card in that deck—the risk assessment card—then you're not playing the odds correctly when it comes to protecting the force. This card plays with any hand you deal, or with any hand you're dealt.

Listen to what SGM Jim Wertman (now commander, Company A, USASMA at Fort Bliss) has to say about the card (when he was CSM of the 4th Bn-7th Inf Div in 1990):

"In a battalion-sized unit when we

Basic Operational Process

MISSION PHASE	OPERATIONAL ACTIVITY	SAFETY ACTIVITY
Mission received. Develop commander's intent.	Initial estimate. Evaluate mission. Develop alternatives. Apply insight from previous mission and experiences. Formulate concept. Decision making.	Mission analysis. Risk assessment. Hazard assessment. Risk reduction action.
Prepare plans and orders.	Mission briefing. Develop detailed concept of operations. Develop plans and orders. Issue orders. Coordinate.	Safety input to briefings, orders and SOPs. Special briefings.
Prepare for execution.	Prepare terrain, equipment and troops. Make necessary changes. Coordinate.	Safety checks. Explain safety measures. Special training. Outside support required.
Execute operations	Lead tactical and logistical operations. Adapt plans as required. Coordinate.	Enforce standards and safety guidance. Review changes for risk implications.
Execute operations	Assess performance, weaknesses and strengths. Identify future action required.	Assess risk management, effectiveness. Implement changes required.

The risk assessment process is part and parcel of the overall operation—*totally integrated*. Although operations and safety are shown separately, integration begins the moment the mission is conceived and continues until the last insight from the after action review is acted upon.

Protection — it's in the cards

went on gunnery or maneuver and fire operations we had zero accidents. I know in my unit the accident rate dropped at least 50 percent when we began using the risk assessment card.

"When the 3D Inf Div went with the 1st Armd Div to Saudi, we took 1010 soldiers and came back with 1010 soldiers. The impact really becomes significant when the process gets passed down to the squad level," Wertman said, and he gives much of the credit to leaders' use of the card.

SGM John Chavez, chief of the CSM course at USASMA, remembers seeing the card used first at Fort Hood, Texas, in 1987, when he was the senior Army enlisted advisor for the Texas National Guard, 1st Bde-24th Cavalry.

"I've seen it used in peace and in battle. It's in combat where the big payoff comes, but it works anytime, anywhere," he said.

When he was CSM, 4th Bn/66th Armd, 3rd Bde, 3D Inf Div in Germany, "we used the card extensively for almost any operation we got into, from railhead to actual deployment to Saudi."

The form can be adapted to "play" in any unit by changing ratings or factors to conform or to fit the specific operations requirements of that unit.

For example, the 3D Inf Div designed a risk assessment card (see below) that uses a combination of number values (from 1 for safest to 5 for most hazardous) and color codes (green for safe, yellow for caution and red for extreme

caution). Leaders could look at the card and the values and tell at a glance what the risks were and make better-informed decisions about what could or couldn't be done.

Using the risk assessment card stacks the deck in your favor when it comes to force protection. You play with a full deck and 'know when to hold 'em and when to fold 'em,' when it comes to mission accomplishment. You also receive powerful payoffs in the form of lives saved, increased efficiency, effectiveness and readiness.

It all adds up to a winning hand.



3D INFANTRY DIVISION
RISK ASSESSMENT



NATURE OF OPERATION			
OPERATION LENGTH	OPERATIONAL AREA		
	LOCAL AREA	AUTOBAHN OR TACTICAL	SUSPECTED HAZARD OR UNK COND
72 HOURS	3	4	5
48 HOURS	2	3	4
24 HOURS	1	2	3

FIRST LINE SUPERVISION			
COMMAND CONTROL	NATURE OF MISSION		
	SUPPORT NONTACTICAL	DAY TACTICAL	NIGHT TACTICAL
AD HOC (HEY YOU)	3	4	5
ATTACHED	2	3	4
ORGANIC	1	2	3

LEADER REST & TIME FOR PREPARATION			
LEADER REST	TIME FOR MISSION PREPARATION		
	INDEPTH	ADEQUATE	MINIMAL
<4 HOURS	3	4	5
6 HOURS	2	3	4
8 HOURS	1	2	3

SOLDIER SELECTION			
TASK	SOLDIER EXPERIENCE		
	QUALIFIED & EXPERIENCED	SOMEWHAT FAMILIAR - BUT NOT EXPERIENCED	OJT
COMPLEX	3	4	5
ROUTINE	2	3	4
SIMPLE	1	2	3

SOLDIER ALERTNESS				
OPERATING ENVIRONMENT	LENGTH OF REST			
	OPTIMUM 8 HOURS	ADEQUATE 6 HOURS	MINIMAL <4 HOURS	
TACTICAL	3	4	5	
GARRISON	1	2	3	

EQUIPMENT STATUS				
EQUIPMENT AGE	MAINTENANCE STATUS			
	HIGHLY MAINTAINED	C-2	C-3	NOT COMBAT READY C-4
OLD	3	4	5	5
AVERAGE	2	3	4	5
NEW	1	2	3	5

WEATHER & ENVIRONMENTAL CONDITIONS			
TEMPERATURE	VISIBILITY / MOISTURE		
	DAY CLEAR DRY	LTD VIS HAZY DRIZZLE	NIGHT DUST-FOG-SNOW MUD-RAIN-ICE
VERY COLD	3	4	5
COLD	2	3	4
MODERATE	1	2	3

RISK ASSESSMENT					
1	LOW	11	12	CAUTION	23 24 HIGH 30

HAZARDOUS OR SENSITIVE CARGO RISK ASSESSMENT					
1	LOW	9	10	CAUTION	19 20 HIGH 30

WHAT ARE YOUR RISK REDUCTION ACTIONS?