

# Cray Valley USA, LLC

## Material Safety Data Sheet

Product: KRASOL K-3  
MSDS ID: S-001491

Revised Date: 01-17-2005

### 01. GENERAL INFORMATION

Cray Valley USA, LLC  
Oaklands Corporate Center  
468 Thomas Jones Way  
Exton, Pennsylvania 19341

Emergency phone number:  
800/424-9300 (CHEMTREC)

Product information:  
610/363-4100

GENERIC NAME

DOT PROPER SHIPPING NAME  
N/AP  
DOT HAZARD CLASS  
Not regulated

UN/NA NUMBER  
N/AP

### 02. SUMMARY OF HAZARDS

WARNING

PHYSICAL HAZARDS: None known

ACUTE HEALTH EFFECTS: Suspect severe eye irritation hazard  
(SHORT-TERM) Suspect skin irritation hazard  
Suspect inhalation/respiratory tract irritation hazard  
Suspect skin absorption hazard  
Suspect ingestion hazard/aspiration hazard if  
swallowed

CHRONIC HEALTH EFFECTS: No chronic health effects information is available  
(LONG-TERM) for this product as a whole. See Supplement section  
of MSDS for information on one product's components.

### 03. COMPONENTS

COMPONENT NAME	CAS NUMBER	% COMPOSITION (BY WT.)
Dibutyltin dilaurate (DBTDL)	77-58-7	AP 60-70
Mineral Oil	8012-95-1	AP 30-40

### 04. PHYSICAL AND CHEMICAL DATA

BOILING POINT	pH
N/DA	N/DA
FREEZING POINT	DRY POINT
N/DA	N/DA

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SPECIFIC GRAVITY (H2O=1 at 39.2F) AP 0.99 at 25C/77F	VOLATILE CHARACTERISTICS Negligible
VISCOSITY UNITS, TEMP.(Brookfield) N/DA	SOLUBILITY IN WATER Negligible
VAPOR PRESSURE N/DA	STABILITY Stable
VAPOR SP GR (AIR=1 at 60 - 90F) N/DA	HAZARDOUS POLYMERIZATION Will not occur

APPEARANCE AND ODOR  
Yellow liquid with characteristic odor

CONDITIONS AND MATERIALS TO AVOID  
Heat, sparks, open flames, oxidizing and reducing agents.  
Contact with bases and reducing agents may cause a low energy release.  
Exposure to direct sunlight may result in product degradation.

HAZARDOUS DECOMPOSITION PRODUCTS  
Acrid smoke-fumes/carbon monoxide/carbon dioxide and perhaps other toxic vapors may be released during a fire involving this product.  
Nitrous oxides and tin oxides may also be released.

### 05. OCCUPATIONAL EXPOSURE LIMITS

SUBSTANCE	SOURCE	TYPE	VALUE
DBTDL	OSHA	PEL-TWA	0.1 mg/m3 (as tin)*
	ACGIH	TLV-TWA (skin)	0.1 mg/m3 (as tin)*
		TLV-STEL (skin)	0.2 mg/m3 (as tin)*
Mineral Oil (Oil mist, mineral)	OSHA	PEL-TWA	5 mg/m3
	ACGIH	TLV-TWA	5 mg/m3
		TLV-STEL	10 mg/m3

\*Exposure limits listed for DBTDL are for Tin, organic compounds as tin

### 06. FIRE AND EXPLOSION

FLASH POINT METHOD=(Estimated)  
GT 200C/392F

AUTOIGNITION TEMP. METHOD=  
N/DA

FLAMMABLE LIMITS (% VOLUME IN AIR)  
LOWER: N/DA      UPPER: N/DA

FIRE AND EXPLOSION HAZARDS  
Not expected to be a fire/explosion hazard under normal conditions of use.

EXTINGUISHING MEDIA  
Dry chemical  
CO2

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Foam

Use water spray/water fog for cooling

### SPECIAL FIREFIGHTING PROCEDURES

Do not enter fire area without proper protection. See Section 5 - decomposition products possible. Fight fire from safe distance/protected location. Though not normally combustible, material will eventually burn if exposed to fire/fire may build enough pressure to rupture closed containers, spreading contents, which are harmful if inhaled, swallowed or splashed in the eyes or on the skin. See Section 8 for personal protection recommended. Notify authorities if liquid enters sewer/public waters.

## **07. HEALTH HAZARDS**

### ROUTES OF EXPOSURE

#### INHALATION

No significant adverse health effects are expected to occur at standard conditions due to the low volatility of this material. However, aerosols, or vapors which may be generated at elevated processing temperatures, may result in respiratory tract irritation. Symptoms may include sore throat, coughing or shortness of breath. Prolonged or repeated exposure to vapors or aerosols may result in headache, nausea, drowsiness and weakness.

#### EYE CONTACT -- PRIMARY ROUTE

Although no appropriate human or animal health effects data are known to exist, this material is expected to cause severe eye irritation. Symptoms may include severe pain and burning sensation, redness, tearing, and swelling.

#### SKIN ABSORPTION -- PRIMARY ROUTE

Although no appropriate human or animal health effects data are known to exist, this material is expected to be a health hazard by skin absorption.

#### SKIN IRRITATION -- PRIMARY ROUTE

Although no appropriate human or animal health effects data are known to exist, this material is expected to be a skin irritant. May cause moderate or severe skin irritation. Symptoms may include localized redness or rash, blistering and swelling of the affected area.

#### INGESTION

Although no appropriate human or animal health effects data are known to exist, this material is expected to be an ingestion hazard. May cause nausea, vomiting and diarrhea if ingested repeatedly or in large amounts. Repeated oral dosing of DBTDL in animals has caused liver damage and central nervous system effects.

Aspiration of this material may cause chemical pneumonia.

#### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

This material or its emissions may affect the central nervous system and/or aggravate pre-existing disorders. Prolonged observation may be indicated.

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This material or its emissions may aggravate pre-existing liver disease.

### **08. PROTECTIVE EQUIPMENT / CONTROL MEASURES**

#### RESPIRATORY PROTECTION

If exposure can exceed the PEL/TLV, use only NIOSH/MSHA approved air-purifying or supplied air respirator operated in a positive pressure mode per the NIOSH/OSHA 1981 occupational health guidelines for chemical hazards.

#### EYE PROTECTION

Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles. Contact lenses must not be worn.

#### SKIN PROTECTION

When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. This equipment must be cleaned thoroughly after each use.

#### ENGINEERING CONTROLS

General room or local exhaust ventilation is usually required to meet exposure standard(s).

#### OTHER HYGIENIC PRACTICES

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### OTHER WORK PRACTICES

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Shower after work using plenty of soap and water.

### **09. EMERGENCY AND FIRST AID**

#### INHALATION

If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

#### EYE CONTACT

In case of eye contact, immediately rinse with clean water for 20-30 minutes. Retract eyelids often. Obtain emergency medical attention.

#### SKIN CONTACT

Immediately remove contaminated clothing. Wash skin thoroughly with mild soap/water. Flush w/lukewarm water for 15 minutes. If sticky, a waterless cleaner may be used. Seek medical attention if ill effect or irritation develops.

#### INGESTION

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If swallowed, give lukewarm water (pint) if victim completely conscious/alert. Do not induce vomiting/risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention.

EMERGENCY MEDICAL TREATMENT PROCEDURES  
Treat symptomatically.

### **10. SPILL AND DISPOSAL**

#### PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED

Evacuate/limit access. Prevent flow to sewers/public waters. Impound/recover large land spill; soak up small spill. On water, material insoluble. Contain/minimize dispersion/collect. Report per regulatory requirements.

Environmental information: No aquatic toxicity data are available for this product. However, some literature reports the fatal poisoning of cattle, minks and palm doves that ingested contaminated feed containing 250-250,000 ppm of DBTDL.

#### WASTE DISPOSAL METHODS

When discarded in its purchased form, this product is not a RCRA hazardous waste. However, it is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste. Comply with all applicable federal, state and local regulations. Waste disposal options include landfilling solids at permitted sites. Use registered transporters.

### **11. ADDITIONAL PRECAUTIONS**

#### HANDLING AND STORAGE PROCEDURES

Store product indoors in a cool, dry, well-ventilated area away from direct sunlight. Store product at room temperature (between 60-90F). Prevent contamination with bases, oxidizing and reducing agents. Use personal protective equipment as described in Section 8 of this Material Safety Data Sheet when handling this material. Product's shelf life is one year after date of receipt.

#### DECONTAMINATION PROCEDURES

Follow standard plant procedures or supervisor's instructions for decontamination operations.

### **12. LABEL INFORMATION**

#### USE STATEMENT

FOR INDUSTRIAL USE ONLY

#### SIGNAL WORD

WARNING

#### HEALTH HAZARDS

MAY CAUSE SEVERE EYE IRRITATION

MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION

MAY BE HARMFUL IF INHALED OR ABSORBED THROUGH SKIN

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MAY BE HARMFUL IF SWALLOWED (TARGET ORGANS: LIVER, CENTRAL NERVOUS SYSTEM)  
ASPIRATION HAZARD IF SWALLOWED--CAN ENTER LUNGS AND CAUSE DAMAGE  
MAY CAUSE LIVER DAMAGE, CENTRAL NERVOUS SYSTEM EFFECTS AND BIRTH DEFECTS  
BASED ON ANIMAL DATA.

### PRECAUTIONARY STATEMENTS

DO NOT HANDLE NEAR HEAT, SPARKS, OR OPEN FLAME.  
AVOID CONTACT WITH EYES, SKIN AND CLOTHING.  
AVOID BREATHING VAPORS/MISTS.  
DO NOT TASTE OR SWALLOW.  
USE ONLY WITH ADEQUATE VENTILATION/PERSONAL PROTECTION.  
KEEP CONTAINER CLOSED WHEN NOT IN USE.  
WASH THOROUGHLY AFTER HANDLING.  
BEFORE USING PRODUCT, READ MATERIAL SAFETY DATA SHEET (MSDS).

### **13. SUPPLEMENT**

#### NPCA - HMIS RATING

Health	2
Flammability	1
Reactivity	1
Personal protection	See Section 8 of MSDS

#### SUB-ACUTE, SUB-CHRONIC AND CHRONIC HEALTH EFFECTS INFORMATION

No sub-acute, sub-chronic or chronic health effects information is available for this product as a whole. However, there is information on DBTDL, one component of this product. DBTDL showed signs of liver toxicity in one sub-acute oral study with rabbits that were treated with 15-40 mg/kg of this material. Another oral study with rats and chickens resulted in no adverse effects. Oral dosing of rats with up to 80 mg/kg of DBTDL have been reported to cause a decrease in spontaneous locomotion and levels of brain neurotransmitters. Additionally, pregnant rats given approximately 1 mg/kg of DBTDL on day 8 of gestation showed an increase in birth defects including external and skeletal abnormalities in the absence of maternal toxicity. DBTDL was negative in mutagenicity tests using standard bacterial cells.

#### REGULATORY INFORMATION

##### TSCA STATUS

TSCA status: All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

##### CALIFORNIA PROPOSITION 65

California Proposition 65 Information: this product does not contain any substances known to the state of California to cause cancer and/or reproductive harm.

#### INTERNATIONAL INVENTORY STATUS

Australia (AICS):	included on inventory
Canada (DSL):	included on inventory
China:	included on inventory
Europe (EINECS):	included on inventory

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Japan (ENCS):	included on inventory
Korea (ECL):	included on inventory
Philippines (PICCS):	included on inventory

\*Note - qualifiers and codes used in this MSDS

EQ = Equal; AP = Approximately; LT = Less Than; GT = Greater Than;  
TR = Trace; UK = Unknown; N/AP = Not Applicable; N/P = No Applicable  
Information Found; N/DA = No Data Available

### **14. DISCLAIMERS**

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable. This MSDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).