MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT INFORMATION:

PRODUCT IDENTIFIER:

DG-GENERATOR NO. 8, 10, 11

MANUFACTURER: ADDRESS:

ATD - ABBAUSYSTEME GmbH

PREPARER Dpl. Ing. JÖRG ROHDE P.O. BOX 10 13 37

GOOD THRU: 6/1/2009

40004 DUSSELDORF

GERMANY

AUTHORIZED SELLING AGENCY:

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JBC INDUSTRIES

57B INUSTRIAL ROAD

BERKELEY HEIGHTS, NJ 07922

PHONE: 908-665-0404

800-522-0256

BAM REGISTRATION NO. PT. 0140, PT. 0141, PT. 0142

DG-GENERATORS ARE INTENDED FOR USE IN ATD-PRESSURE-GAS-TUBES ONLY ACCORDING TO VALID OPERATING INSTRUCTIONS OF THE MANUFACTURER.

SECTION II - HAZARDOUS INGREDIENTS

CHEMICAL CHARACTERIZATION:

MIXTURE BASED ON POTASSIUM PERCHLORATE, AMMONIUM OXALATE, AND SALICYLIC ACID

HAZARDOUS INGREDIENTS	WGHT %	CAS-NO	LABEL	RECOMMENDATIONS
POTASSIUM PERCHLORATE	61	778-74-7	O,Xn	9,22
AMMONIUM OXALATE	29	6009-70-7	Xn	21/22
SALICYLIC ACID	9	69-72-7	Xn	22, 36/38

CLASS OF HAZARD: SPECIAL RECOMMENDATIONS FOR PEOPLE AND ENVIRONMENT

O OXIDIZING AGENT

R9

DANGER OF EXPLOSION WHEN IN CONTACT WITH FLAMMABLE SUBSTANCES

Xn HARMFUL

HARMFUL IF SWALLOWED R22

R21/22 HARMFUL, AVOID SKIN CONTACT, DO NOT SWALLOW

R36/38 IRRITATING EFFECT ON EYES, SKIN

SECTION III - PHYSICAL DATA

PHYSICAL STATE:

CRYSTAL MIXTURE

BULK DENSITY: 800 KG/M3

FLASH-POINT

APPEARANCE & ODOR: WHITE COLOR, WEAK SMELL

pH VALUE:

4.1 (5 G/L H₂O) 20° C

FIRING TEMP.

NON-FLAMMABLE

NON-IGNITABLE UNDER ATMOSPHERIC PRESSURE

EXPLOSIVE LIMIT

LOWER: -

UPPER: -

THERMAL DECOMPOSITION: >200° C (392° F)

HAZARDOUS DECOMPOSITION PRODUCTS: CO, NH;

HAZARDOUS REACTIONS: -

SECTION IV - TRANSPORT

GGVSee/IMDG-CODE: 122/1.4 S UN No. 0432

GGVE/GGS: K1. 1 ZIFF, 47 0432 ARTICLES PYROTECHNIC 1.4 S RID/ADR: K1. 1 ZIFF. 47, 0432 ARTICLES PYROTECHNIC 1.4 S

SECTION V - PREVENTIVE MEASURES; STORAGE & HANDLING

TECHNICAL PREVENTIVE MEASURES

STORAGE:

VERTICALLY, HEAD UPWORDS, COOL & DRY

TEMPERATURE:

<25° C (75°F)

HUMIDITY:

<60%

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ONLY IN CASE OF CONTACT WITH MIXTURE:

PERSONAL PROTECTION EQUIPMENT:

RESPIRATORY PROTECTION: DUST PROTECTION MASK

EYE PROTECTION:

SAFETY GOGGLES OR GLASSES

SKIN PROTECTION:

PROTECTIVE GLOVES

WORKING HYGIENE:

DIRTY SKIN TO BE WASHED UP THOROUGHLY WITH WATER CLOTHES TO THE CLEANER'S

PROTECTION AGAINST FIRE/EXPLOSION:

DO NOT MIX WITH FLAMMABLE SUBSTANCES R-8 DANGER OF FIRE IN CASE OF CONTACT WITH FLAMMABLE SUBSTANCE

DISPOSAL PROCEDURE:

SWEEP UP PRODUCT DRY, DO NOT RINSE WITH WATER

SECTION VI - TOXICOLOGICAL PROPERTIES

LD50 - VALUES:

COMPONENT	APPL.	VALUE	SPECIES	
POTASSIUM PERCHLORATE POTASSIUM PERCHLORATE SALICYLIC ACID		1090 MG/KG 500 MG/KG 891 MG/KG	RAT MOUSE RAT	

PRIMARY IRRITATING EFFECT:

BREATHING DUST: IRRITATING EFFECT IN BREATHING APPARATUS

SKIN CONTACT: IRRITATING EFFECT EYES CONTACT: IRRITATING EFFECT

IRRITATING EFFECT AND POSSIBLE CAUSTIC EFFECT SWALLOWING:

SECTION VII - FIRST AID MEASURES

AFTER INHALING:

AFTER INHALING DECOMPOSITION GASES (CARBON MONOXIDE, AMMONIA) CONSULT A DOCTOR

AFTER SKIN CONTACT:

CLEAN CONTAMINATED PARTS READILY WITH WATER

AFTER EYE CONTACT:

CLEAN WITH PLENTY OF WATER; CONSULT AN EYE DOCTOR

AFTER INGESTION:

DRINK PLENTY OF WATER OR MILK, INDUCE VOMITING, CONSULT A DOCTOR. IF NEEDED, PUMP STOMACH AND ADMINISTER ACTIVE CHARCOAL AND SODIUM SULPHATE. CONTROL CIRCULATION AND ELECTROLYTIC STABILITY.

THE ABOVE INFORMATION IS GIVEN ACCORDING TO OUR KNOWLEDGE TODAY. IT IS GIVEN TO DESCRIBE THE PRODUCT FOR THE ORGANIZATION OF SAFETY MEASURES. IT IS NOT AN ASSURANCE OF THE PROPERTIES OF THE DESCRIBED PRODUCT.