



**CROWN CHEMICALS PVT. LTD.**  
PLOT NO E- 87 & E- 88/1 & E- 88/2,  
MIDC TARAPUR INDUSTRIAL AREA,  
BOISAR, THANE – 401 506

**MATERIAL SAFETY DATA SHEET FOR  
PIPERONAL**

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**SECTION I: PRODUCT IDENTIFICATION**

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**PRODUCT NAME: PIPERONAL**  
**SYNONYMS: 1,3-BENZODIOXOLE-5-CARBALDEHYDE,**  
**HELIOTROPIN OF TAKASAGO**

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**SECTION II: COMPOSITION / INFORMATION OF INGREDIENTS**

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**PHYSICAL STATE: SOLID**  
**COLOUR: WHITE**  
**CAS NO.: 120-57-0.**  
**EINECS NO.: 204-409-7**

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**SECTION III: PHYSICAL AND CHEMICAL PROPERTIES**

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**FORM: CRYSTAL FLAKES**  
**COLOUR: WHITE**  
**ODOUR: SWEET-FLOWERY, HELIOTROPE-LIKE ODOUR, FRAGRANCE OF VANILLA ETC**  
**SOLUBILITY IN WATER: INSOLUBLE**  
**SOLUBILITY IN ALCOHOL: 1 IN 3 OF 70% ALCOHOL.**  
**SPECIFIC GRAVITY: N/A**  
**REFRACTIVE INDEX: N/A**  
**MELTING POINT: 35 – 37°C @ 760.00 MM HG**  
**VAPOR DENSITY: N/A**  
**BOILING POINT: 263.00 TO 265.00 °C. @ 760.00 MM HG**  
**FLASH POINT: >100°C / >230 F.**  
**VOLATILE BY VOLUME: N/A**  
**EVAPORATION RATE: N/A**  
**FLAMMABILITY: N/A**  
**pH VALUE: NEUTRAL**

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**SECTION IV: FIRE AND EXPLOSION HAZARD**

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**FLASH POINT (DEG. F.): >100°C / >230 F. (NON-HAZARDOUS)**  
**UPPER FLAMMABLE LIMIT (% BY VOLUME) : N/A**  
**LOWER FLAMMABLE LIMIT (% BY VOLUME) : N/A**  
**EXTINGUISHING MEDIA: CARBON DIOXIDE; DRY CHEMICAL;**



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**UNIVERSAL TYPE FOAM.**

**SPECIAL FIRE FIGHTING PROCEDURES: SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING SHOULD BE WORN WHEN FIGHTING FIRES INVOLVING ESSENTIAL OILS OR CHEMICALS.**  
**UNUSUAL FIRE AND EXPLOSION HAZARD: NONE KNOWN TO CROWN.**

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**SECTION V: HEALTH HAZARD DATA**

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**PRIMARY ROUTES OF EXPOSURE : SKIN CONTACT : YES      INHALATION : NO**  
**EYE CONTACT : YES      SKIN ABSORPTION : NO      INGESTION : YES**

**CARCINOGENICITY : OSHA : NO      IARC : NO      NTP : NO      ACGIH : NO**

**MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE : NONE KNOWN TO CROWN.**

**EFFECTS OF OVEREXPOSURE: MAY BE IRRITATING TO SKIN AND EYES.**

**EYE CONTACT EFFECTS: MAY BE IRRITATING TO EYES.**

**SKIN CONTACT EFFECTS: MAY BE IRRITATING TO SKIN.**

**INHALATION EFFECTS: MAY BE IRRITATING IF INHALED.**

**INGESTION EFFECTS: MAY BE HARMFUL IF SWALLOWED.**

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**SECTION VI: EMERGENCY AND FIRST AID PROCEDURES**

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**EYE CONTACT: FLUSH IMMEDIATELY WITH CLEAN WATER FOR AT LEAST 15 MINUTES. CONTACT A PHYSICIAN IMMEDIATELY**

**SKIN CONTACT: REMOVE ANY CONTAMINATED CLOTHING OR SHOES. WASH AFFECTED AREAS THOROUGHLY WITH SOAP AND WATER FOR AT LEAST 15 MINUTES.      CONTACT      A      PHYSICIAN      AS      NECESSARY.**



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**INHALATION: REMOVE FROM THE EXPOSURE TO FRESH AIR. IF BREATHING HAS STOPPED, ADMINISTER ARTIFICIAL RESPIRATION AND OXYGEN IF AVAILABLE. CONTACT A PHYSICIAN AS NECESSARY. INGESTION: GIVE WATER TO DILUTE. CONTACT A PHYSICIAN OR LOCAL POISON CONTROL CENTER IMMEDIATELY.**

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#### **SECTION VII: REACTIVITY DATA**

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**CHEMICALLY STABLE: YES**

**CONDITIONS TO AVOID: THIS PRODUCT PRESENTS NO SIGNIFICANT REACTIVITY HAZARD. IT IS STABLE AND WILL NOT REACT VIOLENTLY WITH WATER. HAZARDOUS POLYMERIZATION WILL NOT OCCUR.**

**INCOMPATIBILITY WITH OTHER MATERIALS: AVOID CONTACT OR CONTAMINATION WITH STRONG ACIDS, ALKALIS, OR OXIDIZING AGENTS.**

**HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.**

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#### **SECTION VIII: SPILL OR LEAK PROCEDURES**

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**SPILL, LEAK AND WASTE DISPOSAL PROCEDURES: ELIMINATE ALL IGNITION SOURCES. VENTILATE AREA. CONTAIN SPILL AND RECOVER FREE PRODUCT. ABSORB REMAINDER ON VERMICULITE OR OTHER SUITABLE ABSORBENT MATERIAL. USE OF SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED FOR ANY MAJOR CHEMICAL SPILLS. REPORT SPILLS TO APPROPRIATE AUTHORITIES IF REQUIRED.**

**WASTE DISPOSAL METHODS: PLACE MATERIAL AND ABSORBENT INTO SEALED CONTAINERS AND DISPOSE OF IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATION.**

**NOTE: EMPTY CONTAINERS CAN HAVE RESIDUES, GASES AND MISTS AND ARE SUBJECT TO PROPER WASTE DISPOSAL.**



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**SECTION IX: EXPOSURE CONTROLS/ PERSONAL PROTECTION EQUIPMENT**

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**RESPIRATORY PROTECTION: NONE GENERALLY REQUIRED. IF DESIRED, USE NIOSH APPROVED RESPIRATOR.**

**VENTILATION PROTECTION: LOCAL EXHAUST MEETING ACGIH CRITERIA AS NEEDED.**

**PROTECTIVE CLOTHING: CHEMICAL RESISTANT CLOTHING AS NEEDED.**

**PROTECTIVE GLOVES: USE CHEMICAL RESISTANT GLOVES AS NEEDED TO AVOID PROLONGED OR REPEATED CONTACT.**

**EYE PROTECTION: USE GOGGLES OR FACE SHIELD WHEN EYE CONTACT MIGHT OCCUR.**

**OTHER PROTECTIVE EQUIPMENT: AVOID INHALATION AND CONTACT WITH SKIN AND EYES. GOOD PERSONAL HYGIENE PRACTICES SHOULD BE USED. WASH AFTER ANY CONTACT, BEFORE BREAKS AND MEALS, AND AT THE END OF THE WORK PERIOD. CONTAMINATED CLOTHING AND SHOES SHOULD BE CLEANED BEFORE RE-USE.**

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**SECTION X: HANDLING AND STORAGE**

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**STORE THE MATERIAL BELOW 25° C**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: PLACE MATERIAL AND ABSORBENT INTO SEALED CONTAINERS AND DISPOSE OF IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATION.**

**OTHER PRECAUTIONS: GOOD MANUFACTURING PRACTICES DICTATE THAT AN EYEWASH FOUNTAIN AND/OR SAFETY SHOWER SHOULD BE AVAILABLE IN THE WORK AREA.**

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**SECTION XI: TRANSPORT INFORMATION**

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**IATA: N/A**  
**IMCO CLASS: N/A**  
**CAS NO.: 120-57-0.**  
**TSCA: NOT REGISTERED**  
**EC:**  
**TARIFF NO.: N/A**

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**SECTION XII: TOXICOLOGICAL INFORMATION**

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**LD 50/ORAL/RAT: > 5000 MG/KG**

**LD 50/DERMAL/RABBIT: > 5000 MG/KG IT IS NOT EXPECTED TO BE A SKIN IRRITANT OR SENSITIZER WHEN MIXED WITH OTHER OILS**

**OTHER INFORMATION: AMES-TEST: NO MUTAGENIC EFFECT**

**PRODUCT: MUST BE DISPOSED OF BY SPECIAL MEANS E.G. SUITABLE INCINERATION, IN ACCORDANCE WITH LOCAL REGULATIONS.**

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**SECTION XIII: REGULATORY / CLASSIFICATIONS**

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**HAZARDS : N/A**  
**SYMBOLS: N/A**  
**R- PHRASE: N/A**  
**S- PHRASE: N/A**  
**REVIEWS, STANDARDS, AND REGULATIONS EPA TSCA SECTION 8(B)**  
**CHEMICAL INVENTORY LISTED AS CARCINOGEN BY NTP, IARC OR OSHA: NO**  
**CHEMICALS WEAPONS CONVENTION: NO. TSCA 12(B): NO CDTA: NO SARA**  
**311/312: ACUTE: NO CHRONIC: NO FIRE: NO PRESSURE: NO REACTIVITY: NO**

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**SECTION XIV: PREPARATION DATE OF MSDS**

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**PREPARED BY: CROWN CHEMICALS PVT LTD. DATE: 14-2-06**

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**SECTION XV: DISCLAIMER**

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**THE INFORMATION CONTAINED ON THE MATERIAL DATA SHEET HAS BEEN COMPILED FROM DATA CONSIDERED ACCURATE. THIS DATA IS BELIEVED TO**



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**SECTION XVI: REFERENCES**

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**RIFM – RESEARCH INSTITUTE FOR FRAGRANCE MATERIALS AND OTHER LIBRARY REFERENCES.**